

786 A1
D45

Science Library

UNIVERSITY
OF MICHIGAN

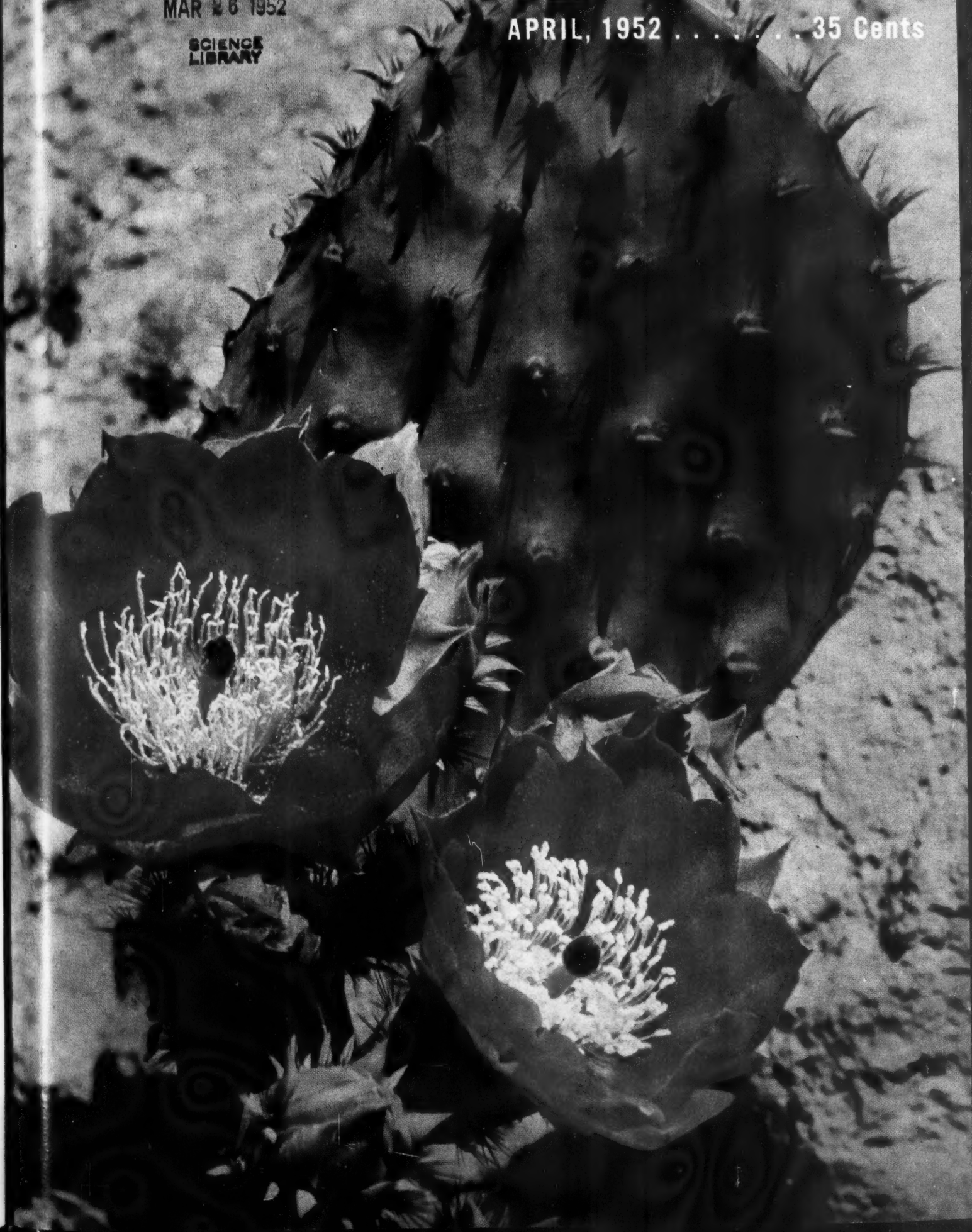
MAR 26 1952

SCIENCE
LIBRARY

Science
Desert

APRIL, 1952 35 Cents

SC1





Colorado Desert. Superstition Mountains in background. Photo by Arthur Burdick.

NOSTALGIA

By RONA MORRIS WORKMAN
Sweet Home, Oregon

Black buttes in the desert waste,
Why do you call to me?
Why do the pines on your shattered slopes,
Where the whispering winds go free
In the sultry heat of a haze-veiled sun,
Touch the lute of my memory?

Was there a day in a life long gone,
When I scaled your wind-worn height,
While the desert burned red in the setting sun,
And dreamed through the purple night?
Did I watch 'til the flaming stars grew dim
In the gold of the morning light?

Only the desert gods can know—
They of this haunted land;
For the winds of the years have buried deep
The mark of my feet in the sand,
And swept from the memory of weathered
stone
The touch of my slim brown hand.

• • •

NEW MEXICO SPRING

By VIRGINIA P. MACDANIEL
San Antonio, Texas

Like tufts of yellow worsted
On a grey-green counterpane,
The cactus dots the waste land
Now that Spring has come again.
And underneath the dusty sage
The wild verbenas run
Cushioned clumps of vivid pink
In the hot and glaring sun,
Like a great forgotten garden
Where centuries ago,
Some heavenly God of Nature
Kept his flower beds here below.
New lacy leaves have gracefully
Bedecked the gnarled mesquite
And flutter lazily and slow
In the early summer heat,
Where Spanish daggers rich with bloom
Stand watchfully to hold
The safety of the desert,
While it's flecked with heaven's gold.
And perhaps if this wasteland is left
to lie
In its brilliance untrammelled by men,
The God of Nature will pass this way
And claim his garden again.

Lure of the Desert

By E. A. BRININSTOOL
Los Angeles, California

Have you delved for gold in the treacherous
hills, led on by an eager hope?
Have you felt the thrill of the "desert rat"
in the "color" along the slope?
Have you staggered over the arid sands to
the desert-phantom's gleam,
With a dry canteen and a swollen tongue,
toward a mocking, fading stream?

Have you camped at night when the full
moon rose, and silvered the buttes hard
by?

Have you felt that desolate, lonely hush at
the coyote's quavering cry?
If you have, you know of the desert's lure,
and the spell of the blistering range,
That grips and holds with a magic hand,
where the sand-dunes shift and change.

TO A WILDFLOWER

By HETTIE O. GOODMAN
Thermal, California

O lovely little flower wild,
Exquisite in your beauty!
I'd love to pick you for my own,
But then, remember duty.

Even if I gently plucked
You'd still soon fade and die;
And I'd be robber, thief and cheat
To others passing by.

So, dear wee bloom, just as you are
I'm leaving you today,
To live but in my memory;
'Tis better far this way.

Within

By TANYA SOUTH

Let us not seek in other ports,
For greatness dwells within our hearts.
Nor need we roam so far and wide
For learning. God is ready guide
Wherever we may be. And more—
An eagerness to give and do
Inspires the Inner Man to soar
To higher crests and ways more true.

THE "DESERT" SHRINE

By GRACE PARSONS HARMON
Desert Hot Springs, California

They come! Who knows the call that brings
them here?
Some vibrant note must lead them true and
clear!

Aglow and radiant with friendly thoughts
They place their stones from dear, remem-
bered spots,
And pause a moment in unconscious praise
Of Him who made the plan for desert ways!

THE DESERT DREAMS

By KATHARINE BUOY KEENEY
Portland, Oregon

The desert dreams in silence for the day
When evolution shall restore the way
Of ancient Times: A palm shall wave its
plume
And brilliant flowers shall once more per-
fume
The tropic air, and every breeze be mild.
A contrast this of barren acres—wild.
No sound is here but bare, dead nothingness;
No song of bird, a terrain blossomless.
Begun in glacial ages Time holds fast
The many secrets hidden in the past.
The wind arises with a whispering sigh
As if a world of ghosts were passing by.

DESERTED BY THE SANDS OF TIME

By CHESTER KENNISON
Orlando, Florida

Perhaps you too can see into my lonely
Desert.

Beyond the campfire's glow;
A world that seems more beautiful to me.
Peopled with those I used to know.
I love the red rocks, the twisted sage,
The gnarled shrub that makes a fight
For Life; the shafts of moonlight on my
Sandy bed tonight; for I feel the still
Sublimity which you taught me to see.
I have loved these nights they cannot
Take from me. I want no more than just
to meet
You there, between those snowy peaks
That scratch the sky—created just for you
and me.
The embers grow cold, the golden coals
Flicker—then smile a while and die.

DESERT CALENDAR

March 30—De Anza Trail Caballeros annual trek from Riverside to Cal-
exico, California.

April 1-30—Special exhibit continued,
sandpaintings of the Hopi and Nav-
ajo Indians made by David Via-
Senor. Southwest Museum, High-
land Park, Los Angeles.

April 1-30—Exhibit of paintings of
Mojave Desert wildflowers by Jane
S. Pinheiro. Plates to be changed
as different varieties come into
bloom. Los Angeles County Li-
brary, Lancaster, California.

April 2-5—Desert Circus Week, Palm
Springs, California.

April 2-11—Ride of the Desert Ca-
balleros, Wickenburg, Arizona.

April 3-5 — Ride of Las Damas,
Wickenburg, Arizona.

April 5-6—Fourth Annual Anza Jeep
Cavalcade and Barbecue; from
Hemet, California to Terwilliger
Valley.

April 5-6—Bandollero Trip to Rocky
Point, Sonora, Mexico, from Yuma,
Arizona.

April 5-13 — Southern California
Chapter, Sierra Club, exploration
trip to desert Southwest and Mex-
ico.

April 6 — Dons Club Travelcade
to Southwestern Arboretum, from
Phoenix, Arizona.

April 6—Desert Sun Rancher Rodeo,
Rancho de Los Caballeros, Wicken-
burg, Arizona.

April 11—Taos Passion Play, Peni-
tente Chapel, Taos, New Mexico.

April 12-13 — Yermo Third Annual
Mineral, Rock and Gem Show,
Yermo, California.

April 12-13—Desert Museum over-
night trip to Borrego Desert and
Palomar Observatory from, Palm
Springs, California.

April 13-16 — Indian ceremonial
dances at Cochiti, San Felipe,
Santo Domingo and other pueblos
near Santa Fe, New Mexico.

April 13-27—Second Annual Tucson
Festival, Tucson, Arizona.

April 19-20—Desert Gem and Min-
eral Society Third Bi-annual Show,
St. Joan of Arc Parish Hall, Blythe,
California.

April 19-20—Second Annual Grub-
stake Days, Yucca Valley, Cali-
fornia.

April 19-20 — Imperial Valley Rock
and Hobby Show, National Guard
Armory, El Centro, California.

April 24-27—International Cavalcade
Pistol Matches, Calexico Gun Club,
Calexico, California.

April 26—Hike to 49 Palms in Joshua
Tree National Monument. Desert
Museum trip from Palm Springs,
California.

April 26-27—Desert Peaks section of
Southern California chapter, Sierra
Club, hike to Owens Peak, near
Inyokern, California.



Volume 15

APRIL, 1952

Number 4

| | | |
|----------------------|--------------------------------------------------------------------------|----|
| COVER | Desert Colors. Photography by Josef Muench, Santa Barbara, California | |
| POETRY | Lure of the Desert, and other poems | 2 |
| CALENDAR | April events on the desert | 3 |
| EXPLORATION | We Explored the Valley of Thundering Water By BETTY WOODS | 4 |
| FIELD TRIP | Garnets Aplenty at Stanley By FENTON TAYLOR | 10 |
| INDUSTRY | Recovering Gold the Hard Way By POWELL and EDNA JENKINS | 14 |
| WILDFLOWERS | Forecast for April | 16 |
| ADVENTURE | Prisoners of the Paiutes By MARIETTA WETHERILL | 17 |
| EXPERIENCE | Life on the Desert By REEVE SPENCER KELLEY | 21 |
| PHOTOGRAPHY | Pictures of the Month | 23 |
| FICTION | Hard Rock Shorty of Death Valley | 24 |
| CLOSE-UPS | About those who write for Desert | 24 |
| LETTERS | Comment from Desert's readers | 25 |
| NEWS | From Here and There on the Desert | 27 |
| TRUE OR FALSE | A test of your desert knowledge | 30 |
| CONTEST | Prizes for camera pictures | 32 |
| MINING | Current news of desert mines | 35 |
| LAPIDARY | Amateur Gem Cutter, by LELANDE QUICK | 36 |
| HOBBY | Gems and minerals | 37 |
| COMMENT | Just Between You and Me, by the Editor | 42 |
| BOOKS | Reviews of Southwestern Literature | 43 |

The Desert Magazine is published monthly by the Desert Press, Inc., Palm Desert, California. Re-entered as second class matter July 17, 1948, at the post office at Palm Desert, California, under the Act of March 3, 1879. Title registered No. 358865 in U. S. Patent Office, and contents copyrighted 1952 by the Desert Press, Inc. Permission to reproduce contents must be secured from the editor in writing.

RANDALL HENDERSON, Editor
BESS STACY, Business Manager
E. H. VAN NOSTRAND, Advertising

MARGARET GERKE, Associate Editor
MARTIN MORAN, Circulation Manager

Los Angeles Office (Advertising Only): 2635 Adelbert Ave., Phone NOrmandy 3-1509

Unsolicited manuscripts and photographs submitted cannot be returned or acknowledged unless full return postage is enclosed. Desert Magazine assumes no responsibility for damage or loss of manuscripts or photographs although due care will be exercised. Subscribers should send notice of change of address by the first of the month preceding issue.

SUBSCRIPTION RATES

One Year.....\$3.50 Two Years.....\$6.00
Canadian Subscriptions 25c Extra, Foreign 50c Extra
Subscriptions to Army Personnel Outside U. S. A. Must Be Mailed in Conformity With
P. O. D. Order No. 19687

Address Correspondence to Desert Magazine, Palm Desert, California

We Explored the Valley of Thundering Water



Spider Rock in the Valley of Thundering Water.

By BETTY WOODS

Map by Norton Allen

Photos by Cleo Woods

PONCHO, my husband, and I stood at the base of a fantastic obelisk in the Valley of Thundering Water. We looked up and up. This mighty sliver of red sandstone projected into the sky 260 feet above us. Aeons of wind and weather had worn the slab to a giant's toothpick. Spider Rock, the Navajos called it. They say if a spider ever reaches the top the world will fall to pieces.

We were to find many fanciful wonders in this almost unknown bit of New Mexico, 50 miles northwest of Gallup. It was a lonesome land of hills and mesas and sandstone bulwarks. A land of extravagant rock formations which one's imagination can visualize as owls, drums or ghosts.

In a remote corner of the Navajo reservation in New Mexico Betty Woods found many strange things—fantastic rock formations, garnets that lay exposed on the ground, the dwellings of prehistoric Indians, and most interesting of all, a Navajo family which has adjusted itself to the white man's civilization. With Betty Woods you will explore some amazing places, and meet some delightful people in this story.

It is a lonely land and utterly wonderful.

Back in the cedar-grown valleys one can see only an occasional hogan on this remote part of the Navajo reservation. We had come here to explore the valley and to learn more of its history and legends. And to find the Great Eye. This Eye is a natural bridge that is hidden somewhere beyond in the maze of canyons, arches and strange nature-carved cliffs.

We left Spider Rock and drove down the road to see more of this colorful land. Two miles beyond we saw a tree-fringed ranch hugging a low hill. There was a house made of

hewn sandstone blocks. Beside it was a hogan built of the same material. In the neat yard a tiny apron of lawn spread in front of the house. The place was Navajo with prosperous touches of Anglo-American.

When we stopped in front of the hogan a genial, middle-aged Navajo came out. "Get down and come in," he said. He told us he was John Watchman. We knew about the Watchman family. For many years they had been reservation leaders.

Poncho explained, "We'd like to see the valley and to find the Great Eye. Do you know where this is?"

With his lips John pointed to a

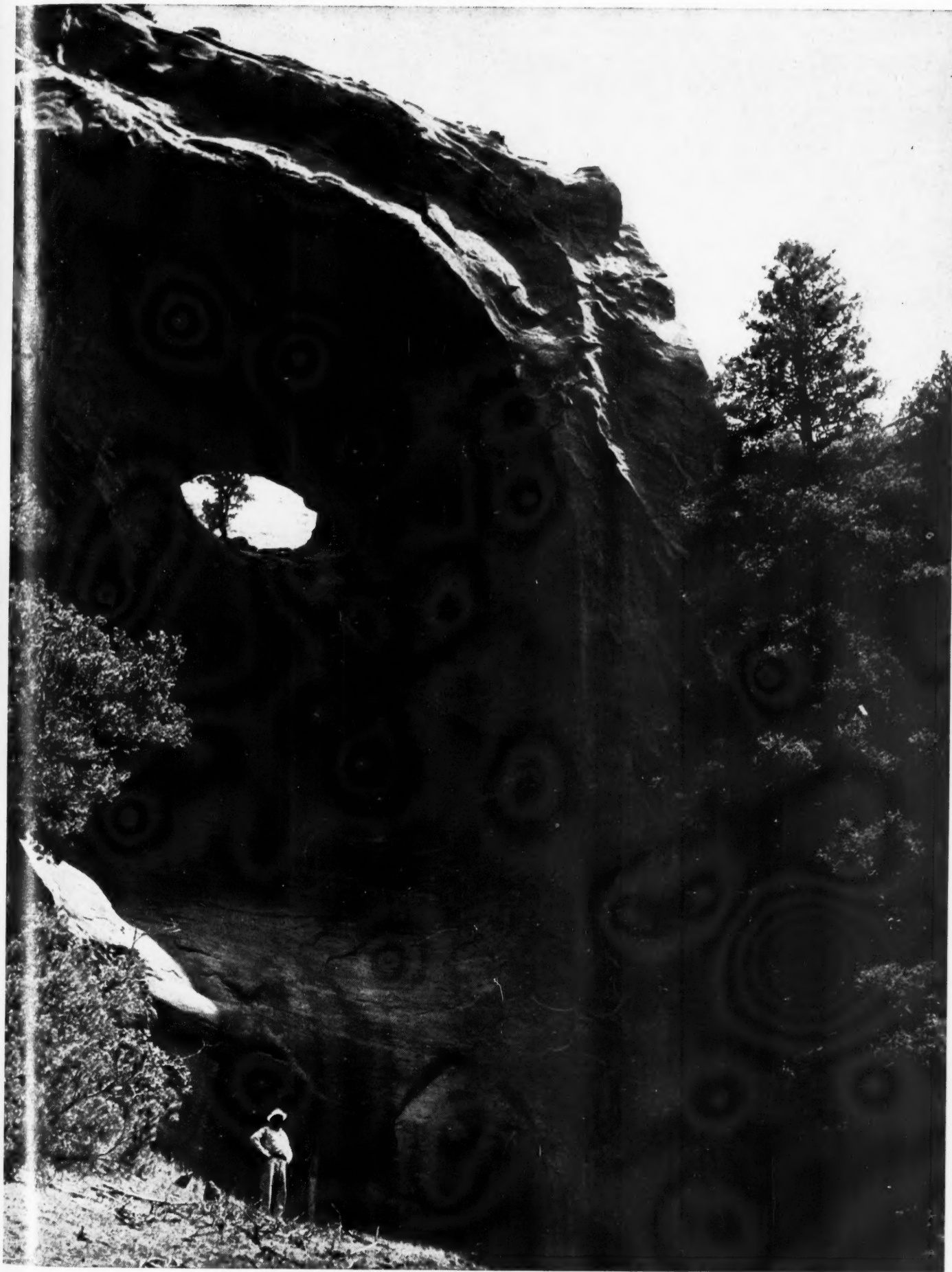
co Betty
garnets
ins, and
lf to the
amaz-

ide it was
aterial. In
of lawn
use. The
prosperous

nt of the
d Navajo
come in,"
was John
he Watch-
they had

d like to
the Great
is is?"
ated to a

AZINE



The Eye—a sacred spot to the Navajo Indians.

APRIL, 1952



John Watchman at the entrance to an old sweat house. In the background, the Valley of Thundering Water spreads out to the mountains beyond.

mass of red cliffs in the east. "Over there," he said.

John's two-room house was comfortable. Books were in easy reach of deep-cushioned chairs. On the walls hung many family photographs. "At Indian school they told us to go home and make our houses like the white people's. My wife and I did this. Now our children with good educations like to come home and see us." Then John called Flora, his wife.

She came in quietly bringing their ten-year-old daughter and two visiting grandchildren. Flora Watchman is a small gentle woman with a soft voice and humor-filled eyes. She is a graduate of Haskell, a nurse, and a niece of Mrs. Chee Dodge who raised her.

The three children stood back and appraised us. Loretta, the daughter, had a madonna face with a touch of pixie. She cradled in her arms a speckled kitten named Patricia. The two grandchildren stayed behind a mongrel they called, *Dog*.

John told us of unusual places we could see. Of a garnet-covered knoll, of cliff dwellings, Navajo shrines. The place where Kit Carson swam across the lake—and the Great Eye. He would show us all of them.

It was dark when we got back to our tent that night. We didn't have our trailer this time. Just a tent pitched on a wind-blown loma that gave us a view of this vast Navajo land. At the tent door, I stooped to untie the mosquito netting screen. Suddenly Poncho knocked me through the door onto the bed. "Rattlesnake!" he exclaimed. He

had heard a whispered hiss of warning from a snake that perhaps was too cold to rattle. In the beam of the flashlight it lay coiled just six inches from where my feet had been.

Poncho told me in his everything-is-under-control voice to hand him the gun from under the bed. So, trying to be calm about the whole thing, I handed the gun. He lined up his sights in the dim light and pulled the trigger. The smell of gun smoke filled the tent. Then came the pungent odor of the dead snake.

The next afternoon we told John and Flora about the night's experience. John said they had an herb called *Nabee* which Navajos use to keep snakes away. Flora went to her sewing machine and came back with a piece of dried root. It had a strong aromatic scent. She told me to make a powder or a tea of it, then sprinkle it over the ground around the tent. She said sometimes medicine men make a tea out of it to treat snakebite.

Gratefully we took the herb. We scattered pieces of it all over camp and saw no more snakes. But to make sure, we carefully looked the place over every night.

Sundown was only an hour away when we left the hogan to hunt garnets. John said late afternoon was the best time to find them. The slanting sun rays picked up the color and made the gems easier to see. John led the way to a round sandstone bluff back of his home. Until we reached its base it was hard to figure out how we'd get to the top. The sides seemed too smooth for footholds. But hoofs of

many sheep had worn a narrow zigzag trail which was easy to follow.

When we reached the top of this pinyon-and-cedar-clad mesa we had a maplike view of the valley below—the deep arroyo that was once a cattle trail, Priest rock, the cliff-dwellers' caves, the place where Kit Carson swam the lake. And far across the valley we could see the Great Eye. Beyond were the mesas stepping back into the sky.

John looked at the sun low in the west. It was just right, he said. He took us to a point marked by a scrub cedar. There on the ground lay tiny glowing drops of red and rose and crystal pink! Arizona rubies, some people call them. Every rain uncovers more garnets. The children gather them for Navajo friends who combine the gems with turquoise in their silver-smithing. Today the Indians are using garnets in the same way artisans did in Hellenic times.

Flora, whose people had lived in the valley for generations, said her mother used to find green garnets. Now no one ever finds them any more. We were all down on hands and knees looking. Then Poncho and I had an idea. We were old hands at hunting prehistoric beads on anthills. Why not garnets? And sure enough, the largest gem we found came from an anthill a few feet away.

John and Flora said the Navajos have a myth about garnets. They believe the gods send them up through the earth to seed it with beauty. And the gods send seeds in the raindrops and hailstones to plant the earth.

Flora laughed and said, "They're pretty legends we like to tell the children." Then we told her garnets are a symbol of true friendship among white people. And wasn't Noah supposed to have used garnets to light the Ark?

How lucky we were to have found John and Flora! They understood Anglo people better than any Navajos we'd ever known. Because of this understanding they were willing to share with us legends close to the hearts of their people. Years of teaching and working with Anglo-Americans have helped John and Flora figure out some of our complexities.

Just beyond where we found the garnets John showed us something else. There, facing west were ruins of old hogans and sweat baths. John said that in times of stress the Navajos built their hogans and sweat baths with doors facing west rather than east, the traditional frontage of an Indian hogan. These were built during the years the Indians were fighting the Anglo soldiers. We felt the sadness of these ancient places. We could picture whole Navajo families hurrying up here

into the timber to hide from pursuing white troops. Anxiety and the worried planning must have taken place within these log walls!

In front of us stood split logs partly tumbled down, like little woodpiles. Long ago rain had washed away the earth that had banked them. Beside each sweat bath was a pile of discarded rocks which had been used for heating the enclosure. John told us a man takes only a valued friend with him to share a sweat bath. At such times stories are recounted and legends passed on. Occasionally old men sit in with the younger ones to relate what happened to the Navajos many years ago.

We walked among the old pinyons and cedars to look at other hogan ruins. When we passed a great cedar tree bent by years of twisting winds, we saw on the ground a pair of weathered cradle boards. "We do not touch them," John said. "I first saw the cradle up in this tree when I was a young man. Long ago the Navajos used to dispose of babies like that. They put the little one on its cradle and found a tree with branches to keep it safe."

On the way back to the house Flora said they would take us to their sheep camp tomorrow. And John would show us something no Anglo had ever seen. We wanted to know how far away the sheep camp was.

"Not far," John laughed. "Only a few Navajo miles. You white people say our miles are longer than yours, and they never are the same."

The sheep camp lay cupped in a tiny valley hidden by mesas. In a sunny low-hanging cave an ice-water spring seeped out of the rock floor. Live oak and pine, pinyon and cedar grew in a protecting hedge against the wind. On the north side of this enchanting spot aspen stayed close to the hillsides. And at the valley's narrow entrance, facing east, stood two giant rock formations that resembled the fantasy people in Navajo legends.

These, John explained, were the Medicine Man and the Yeibichai. We were the only Anglos he'd ever shown them to. We stood in quiet respect to marvel at these stone figures. They rose above us 30 or more feet high. We could easily understand why the Navajos worship these rock beings. No person could live here among Nature's remarkable manifestations and not be moved by what he sees.

Flora had started a campfire to warm a Dutch oven filled with stew. She and I had planned a picnic lunch for the day. When we each had our food unpacked and spread out on the tablecloth there was no room left for dishes. Woman-like we had both brought too much food. But that didn't bother Chute No. 2. "Now we can stay out for supper," he said. We called this four-year-old grandchild by that strange name because he was always playing rodeo and saying, "Here I come out of Chute No. 2." Characteristically, the family picked up the name.

During the meal we talked about names and legend-making places. Poncho told about the little cliff dwelling

we found. Up a narrow brush-grown canyon about a half mile from the tent we had discovered a small cliff ruin on a sandstone shelf. It looked like a pulpit tucked under that overhanging cliff. Along the ledge we saw the ashes of many fires but we found no evidence of permanent dwellings.

"That's the Witch's Nest," said Flora. "We don't go there."

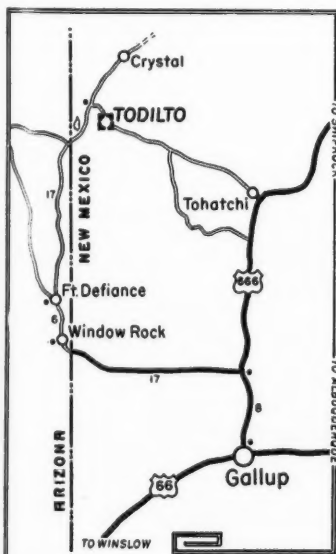
We never mentioned it again.

John told us that winter is legend-telling time. Navajos tell their children how things are named, like the Valley of Thundering Water and Spider Rock. John laughed when he mentioned the rock.

"Some white people call it Cleopatra's Needle. Priest Rock they call Venus's Needle. Some Navajos call this whole valley Todilto. Now white people call it Todilto Park."

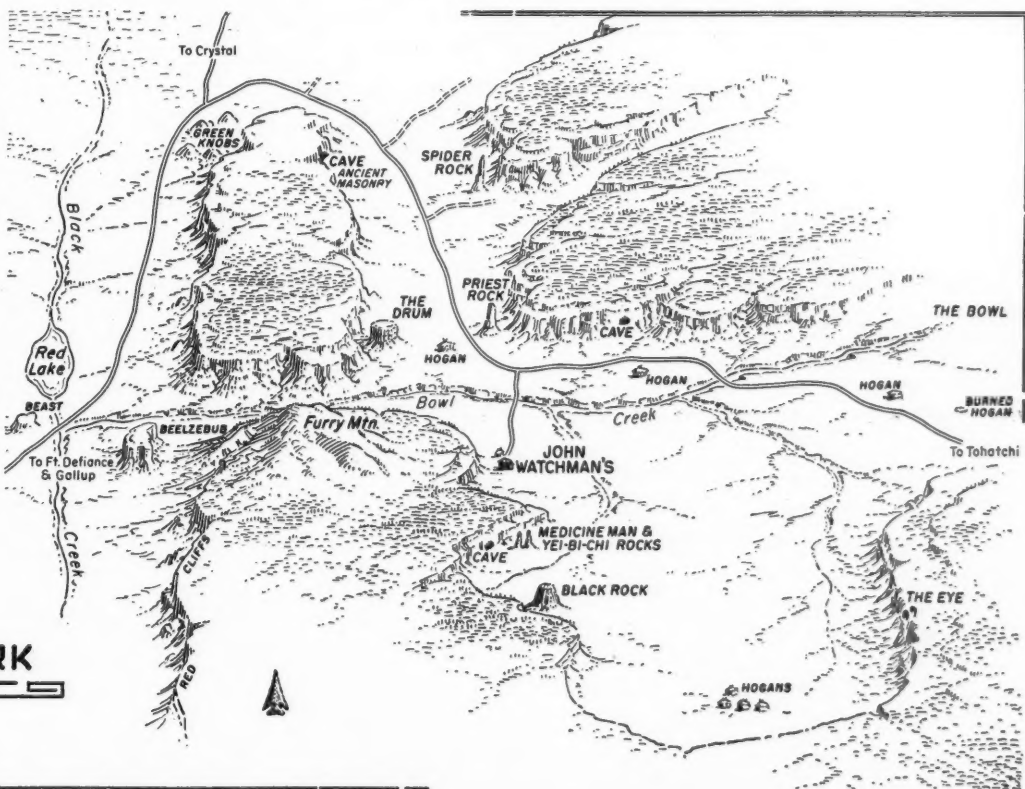
The Navajo name of Priest Rock for Venus's Needle was apt. On the shoulder of this 207 foot obelisk Nature carved out a perfect santo-like figure of a priest. The two Needles are about two miles apart. By following car tracks that took out across the desert we found we could drive up to both of these great slabs.

Geologists say the valley floor is underlaid by the Chinle formation which they explain is made up of a series of alternating layers of shale, sandstone, siltstone and limestone. These layers were put there in a shallow sea 100 million years ago. A close look at Priest Rock reveals many different rock layers. The lower part is many colored, tiny-banded siltstone.



TODILTO PARK

NORTON ALLEN
After B.M.





Mrs. Watchman, Loretta and the author gather garnets on the hillside above the Valley of Thundering Water.

The upper part, geologists say, is massive fine-grained Entrada sandstone.

Here in Todilto also are highly colored shales similar to those found in the Painted Desert. Too, there are petrified trees much like those in the Petrified Forest. About 10 or 12 miles out of Ft. Defiance on the road to the valley are the weird lava formations of the Green Knobs, the Beast and Beelzebub.

Below the mesa where we found the garnets the land many years ago was covered with a lake. Now there's only that deep arroyo. A prolonged rain and heavy flood washed away the natural dam that held the lake. Old men's grandfathers said when the water rushed out it made a noise like thunder. That is why the Navajos call this place the Valley of Thundering Water.

John told us about Red Shirt, or Kit Carson, as he is known to us in history

books. On this part of the reservation the famous frontiersman was called Red Shirt. Other places the Navajos gave him different names. It was just before the Long Walk, John explained, when there were many Navajo hogans along the edge of the lake. There was trouble between the Indians and the Anglo-Americans. The government sent Kit Carson to Todilto on a peace mission.

We could picture what happened on that day so long ago. Far up the road the Indians saw Kit Carson coming in a mule-drawn coach, for Carson had sent ahead word of his visit. It was to be a big feast day. Cautious Navajos gathered from all over the reservation to hear what Carson had to say. In past years there had been many broken treaties. But the Indians would listen. So they waited in quiet skepticism for the stagecoach to stop beside the lake. After gifts were ex-

changed, there was feasting and speech-making.

Carson said all white men wanted to live peacefully with the Navajos. "We are strong people," he told them. "The Navajos are strong people."

"Navajos are stronger," challenged old Calico Breeches.

Then Carson did a strange thing. He stripped off his clothes and jumped into the lake. The Indians stood quietly watching the swimmer's progress across the half-mile course. Carson's white arms flashing in and out of the water looked odd to the Navajos. When he reached the other side, Carson got out and waved at his amazed audience.

"Owooo — Owooo — Owooo." The Navajos gave this approving call, for Carson had demonstrated to the Indians that he was strong. Then to astound them further, he plunged into the lake and swam back.

the
H
live
dian
and
pear
Car
D
the
mor
ing
mes
hou
the
of
ove
hor
allo
"

wha
othe
kno
leti

S

took
by
Gre
But
stru
wou
the
tran
awa
saw
som
past
trees
Gre

*The
crec
Nav



John and Flora Watchman, both school graduates, have adjusted themselves to the civilization of the white man.

"You are strong like the Navajos," they said.

However, peace promises were short-lived. There was more soldier and Indian trouble. Then the Long Walk and Bosque Redondo. Finally lasting peace. But old men still tell the Kit Carson legend.*

Days passed. We still had to find the Great Eye. "We'll start early tomorrow," John said. The next morning the sun had just cleared the eastern mesas when we left the Watchmans' house. On the way John showed us the government diversion dams—a few of which had withstood floods. All over the valley grass was good. Fat horses and sheep grazed on prosperous allotments.

"This," said John, "shows the people what controlled grazing can do. When other Navajos see my good grass they know Washington was right in not letting us have too many sheep."

Soon we abandoned the road and took off across sagebrush flats slashed by arroyos. Now we saw clearly the Great Eye in the rimrock just ahead. But a new fence blocked the way. We struck out on foot. The narrow trail wound past a huge flat rock on which the Navajos do their thrashing. Horses tramp out the grain and the wind blows away the chaff. Over to the right we saw a little cluster of hogans close to some cornfields. The path went up past big pines and weathered cedar trees. It took us to the base of the Great Eye. At last we were looking

at one of the strangest spectacles in this valley of strange formations.

The hole-in-the-rock was a few hundred feet above us. How many million years ago had a tiny drop of water started the erosion that finally bored out this big hole? The Eye itself is about 20 feet in diameter. Standing under it, I felt I was looking into the eye of a great monster. The Navajos worship this place. In fact, they worship most natural wonders.

"This place means a god to us," John explained. "Sometimes we bring a medicine man here and make prayer offerings to it."

Below the Eye on a ledge was a little cliff dwelling. An enterprising Navajo was using it for a sheep corral. In fact, we saw many of these old cliff homes turned into sheep shelters against winter storms. Some of the open caves had primitive pictures painted on the walls. Others had symbols pecked out in the sandstone.

We hated to leave this valley of many secrets yet unrevealed. Few places in the desert have so much to give you. If you're an artist or photographer, its rugged beauty is yours to take. If you're a geologist and rockhound, the hills and mesas are yours to explore. If you're an archeologist, the cliff ruins are there to intrigue you. If it's history you want, there's legend for you. If you want to see the Navajos living in primitive peace, Todilto is the place to go.

Even if you're just an ordinary human being fed up with strikes, Russian vetoes and inflation, the Valley of Thundering Water is for you. You'll

enjoy driving over those covered-wagon roads that take you straight to long hours of adventure.

THOUSANDS ANNUALLY VISIT ARIZONA BOTANICAL GARDEN

Desert plants, ranging from cactus as small as a shirt button to the giant saguaro, which sometimes tower 50 feet, annually draw 100,000 visitors to the Desert Botanical Garden of Arizona. More than 10,000 species of desert plants grow in state-owned Papago Park, a 360-acre tract eight miles out of Phoenix. Although the world's largest collection of desert plants, the garden has only about one-third of the 30,000 species known to exist. New ones are discovered every year.

W. Taylor Marshall, director of the garden, always is anxious to point out that cacti, which have a common ancestry with the rose, aren't the only type of desert plant. In fact, they don't even form a majority.

"Most trees and shrubs of the desert belong to the pea family," Marshall explains. He lists the palo verde, mesquite, catsclaw and ironwood in this category. These are four prominent trees of desert districts.

Desert plants developed from natural families which were stranded in areas which became progressively drier. All, except the mushroom and a few others, are flowering plants.

The Desert Botanical Garden was started in 1937 by Gustave Starck, a Swedish botanist. — *Gallup Independent*.

*The feat of swimming the lake has been credited to Capt. Henry Dodge, but the Navajos of Todilto insist it was Kit Carson.



Stanley Butte rises in the distant sky. This picture was taken south of the San Carlos Indian reservation fence. The road becomes much rougher farther on, and requires a truck or jeep to travel safely.

Garnets Aplenty at Stanley

By FENTON TAYLOR
Map by Norton Allen

MANY ARIZONA maps still show the thin line of an unimproved road extending from the thread of Highway 70 to a tiny circle labeled Stanley. The town of Stanley is gone, fallen victim to a shutdown of mining activity in the area 33 years ago; but the road is still used as an access route to several ranches in the section. It leads to one of the most remarkable and beautiful areas in southeastern Arizona — the Stanley mining district.

Located in Graham County, Arizona, the Stanley mining district is bounded on the north by the San Carlos Indian reservation, on the west by the Pinal County line and on the south by Old Deer Creek. The eastern boundary is an indefinite line in the wilderness area between the Santa Teresa Range and Stanley Butte. It is a highly mineralized region, constantly drawing prospectors and rockhounds within its borders, and is noted for the fine andradite garnet specimens

The road to the old ghost mining camp at Stanley Butte is rough and rocky. But there's a rock hunter's paradise at the end of it. Here is the story of a mineralized area in Arizona which contains not only yellow garnets, but also quartz crystals, fluorite, calcite, magnetite, pyrite, malachite, azurite—and even agatized coral. And there's a bit of interesting history in this region also.

found on slopes surrounding the town-site.

I learned of this famous garnet locality on my first rock hunt. "There are beautiful yellow garnets at Stanley Butte," reported an enthusiastic amateur geologist. Later, a rancher told me, "Just above the old postoffice site at Stanley, you can kick the rotten rocks apart and find odd pieces about the size of walnuts. They're curious square-shaped rocks."

A U. S. Conservation worker showed me a garnet he had found in a mine dump near Stanley. Small and dark, the crystal clung to the side of a fist-sized rock. Light flashed from its geometrical faces. I held it in my hand, and immediately I wanted to visit this location—practically in my back yard

—and gather some of these garnets for my own collection.

Five other collectors joined me, and we started with the sun one fine spring morning. In a little more than an hour we reached the turn-off point on Highway 70, a distance of 56 miles from Safford and about eight miles from Coolidge Dam.

The Stanley road is easy to miss. It turns south from the highway just at the top of a long mesa and appears at first glance to be nothing more than an extra wide shoulder at the side of the asphalt.

Three good markers indicate the turn-off: to the south of the highway a rectangular yellow "Watch for Cattle" sign; on the north side, a motel sign. Both are situated right at the junction.

On
ston
the
gas
hills
this
corr
W
old
lect
zona
a tru
tortu
roug
ing
hills
the
coult
ters.
of th
until
Ly
party
the m
pecti
ber c
drov
Proc
with
Fo
stopp
ing u
thous
reare
morn
Be
We l
had c
below
panq
ervoir
Gila
dome
fertil
idge
once
an er
ert h
years
Lo
chun
I tho
ing a
mun
six m
in th
worth
As
ing r
along
crysta
them,
must
We
barbe
south
India
Stanle
reserv
explo

On top of the hill, scattered foundation stones and heaps of rusty cans clutter the site of a one-time "last chance" gas station, now in ruin. Since the hills in this region look almost alike, this last landmark helps identify the correct one.

We made the trip in Rex Layton's old truck. Rex is an enthusiastic collector and lapidary of Thatcher, Arizona. The roughness of the road makes a truck or jeep almost imperative. The tortuous way becomes progressively rougher, with narrow dugways winding up and down the faces of steep hills. Rock outcrops and bluffs crowd the way, and late-model automobiles could not escape the many high centers. Once started on the last part of the trip, there is no turning back until the townsite is reached.

Lyle Grant of Safford, also in our party, can testify to the roughness of the route. Lyle has done some prospecting at Stanley and has filed a number of claims in the region. Once he drove his sedan to the end of the road. Proceeding carefully, he still came out with fenders bent and sides scratched.

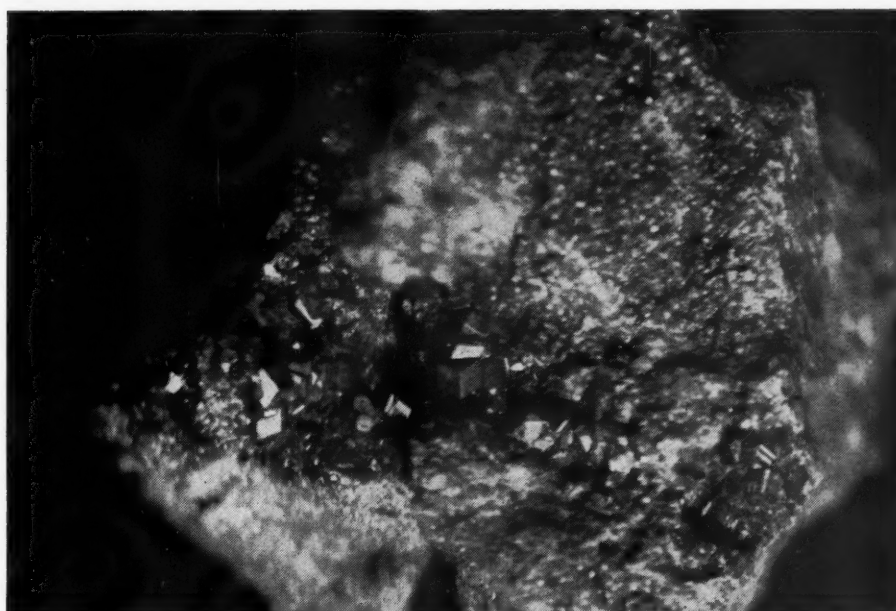
Four miles from the highway we stopped to look around. Ahead, thrusting up from a welter of hills cut by thousands of gullies, Stanley Butte reared a knife-like peak into the pale morning sky.

Behind us was a spectacle indeed. We hadn't realized what a grade we had climbed until we looked back. Far below, stretching out in breathtaking panorama, was the San Carlos Reservoir, created by the waters of the Gila River, impounded by the triple-domed Coolidge Dam for irrigating fertile lands around the cities of Coolidge and Casa Grande. The reservoir once was a lovely expanse of water—an emerald in the circle of yellow desert hills. Now it is almost dry from years of drouth.

Looking about, I noted occasional chunks of massive garnet float. Surely, I thought, any mineral collector wanting a few garnet specimens in a minimum of time could drive out five or six miles on the Stanley road and find in the float at least one specimen worthy of his display case.

As we continued our journey, flashing needles of sunlight from rocks along the route betrayed hundreds of crystal bearing boulders. Some of them, judging by their scintillation, must have contained fine crystal groups.

We stopped at the steel gate and barbed wire fence which marks the southern boundary of the San Carlos Indian reservation. At one time the Stanley Butte region was part of the reservation and was closed to mineral exploitation. Nevertheless, prospectors



Above—One of the garnet specimens, showing clearly the granular structure of the massive garnet matrix and the perfect rhombic dodecahedral faces that shine out from the crystal mass. About natural size.

Below—A specimen of dark garnets, so entwined as to show only a few rhombic faces, some of which are distinct in their appearance.

continued exploring, unable to resist such promising country. Finally, in 1896, the southern part of the reservation, a mountainous strip of land, was removed from Indian control, and the reservation boundary shifted north to its present location.

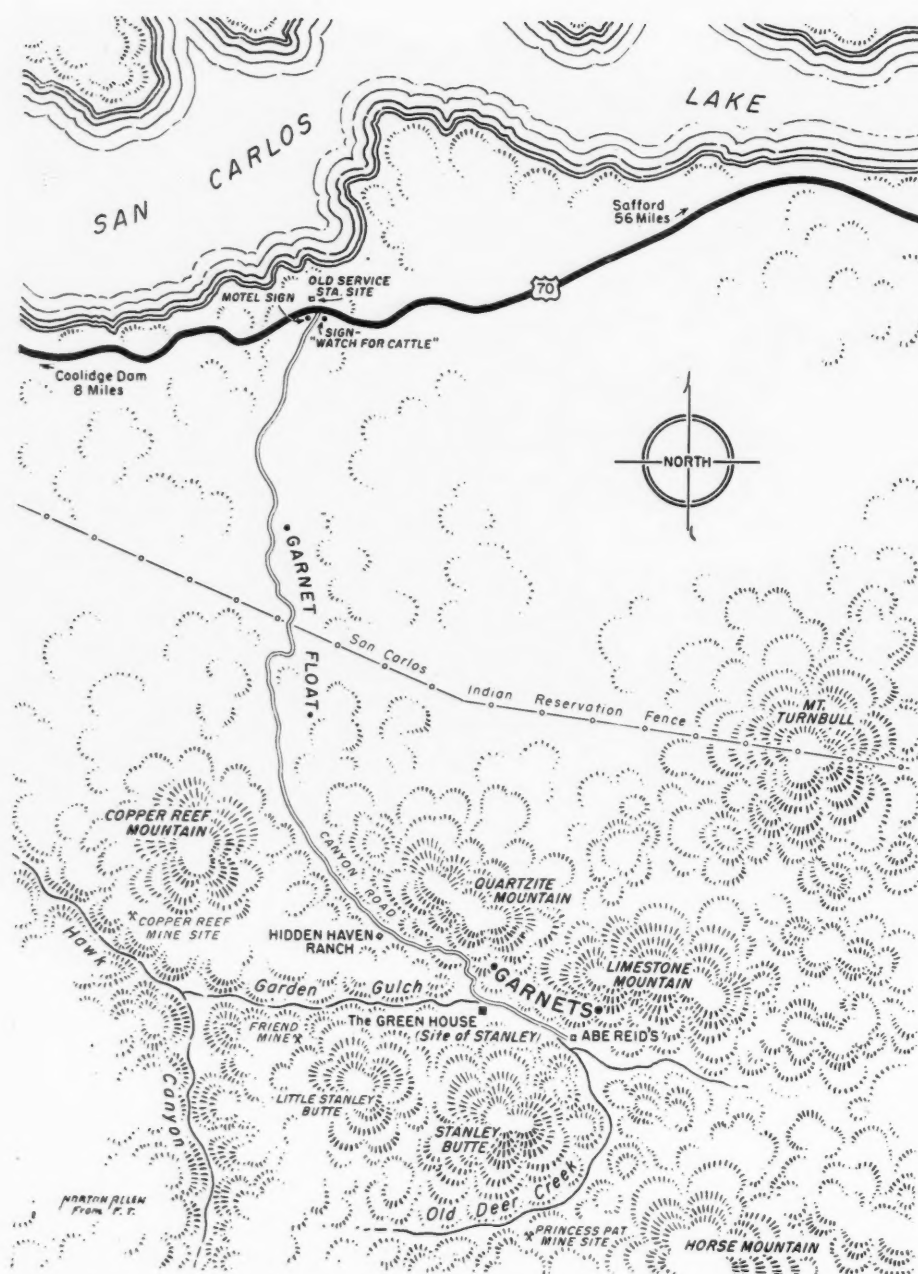
Some people still refer to this land as "the strip." The San Carlos Apache Indians are hoping someday it will be returned to them.

On the other side of the gate the road soon displayed its rough nature. We who were riding on the flat bed of the truck had to hang on to keep from being bounced out among the

rocks and cacti, even though the vehicle was barely crawling along.

This 12-mile drive presented wild desert scenes of rare beauty. A recent spring rain had sprouted green grass, and ocotillo stems were velvety masses of tiny leaves. Saguaro towered over the landscape. Cacti of many varieties covered the hills along the road, and some of the smaller ones bore brilliant magenta blossoms.

We crossed a deep gulch and followed a narrow canyon into cedars, scrub-oak, a few pinyons and sycamores. We approached the corrals of the Hidden Haven Ranch, huddled in



the bottom of the canyon, just in time to see "Stumpy" Lewis, the lone cowhand working there, brand a bawling calf. This ranch, owned by Sheriff H. "Skeet" Bowman of Graham County, includes 20 sections of land of which the northern portion of Stanley Butte and the old settlement site are a part. Bowman, who now lives in Safford, visits the ranch occasionally.

"The best garnets," Stumpy told us, "are found just north of the Green House. You'll have to dig for good ones." He asked us to keep the gates closed so that the wild range cattle could not stray. We weren't to camp near the springs, as the stock would not come in to water if we did.

Sheriff Bowman told me later that he has considerable trouble with rockhounds and prospectors who leave the gates open. "Some of them," he added, "come in and even cut my fences

without any regard for property." He doesn't care how many rockhounds invade the area so long as they show proper courtesy while there.

From the ranch the road climbed over a divide and onto the southern shoulder of Quartzite Mountain to give us our first full view of Stanley Butte. It is a steep-sloped mountain with cedar trees, oaks and various types of bushes feathering its sides.

The deep incision at its foot is Garden Gulch, the canyon which skirts it like a northern boundary. Cut through the heavy limestone strata, Garden Gulch continues west to join the bigger, deeper Hawk Canyon.

One of the inhabitants of the old town, Al Lewis, for whom Lewis Canyon was named, discovered a natural basin on top of the Butte and raised an excellent potato crop there. Bowman also planted and harvested potato

crops on the half-acre of mountain soil when he lived on his ranch.

We could see the branches of leafless sycamore trees down in Garden Gulch. They marked our destination. In low gear, we wound slowly down the steep, narrow dugway into Lewis Canyon, and from there between narrow, tree-lined canyon walls to Garden Gulch.

In normal times Garden Gulch runs a foot or more of water during the spring months. The trickle that oozed out of the sand was scarcely enough to wet our tires as we crossed it.

Through the bare white branches of the sycamores, we could see about an acre of fairly level, grassy land caught in the horseshoe bend of the creek. Off to one side and surrounded by a high fence was the Green House, still wearing the color for which it was named.

A prospector named J. Flaherty once lived in the house. He raised such a fine garden in the canyon that other settlers named the creek Garden Gulch. We were delighted to see the white blossoms on apple trees still alive around the house.

The Green House was once the approximate center of Stanley, a town credited in the 1910 census with 139 inhabitants. By 1920 this figure had shrunk to 54, for in 1918 the two largest mines of the region ceased activity. A full-time teacher taught 12 children in 1920. Three times a week that year, mail was carried in to the inhabitants.

The road—rough, rocky and narrow—continued up Garden Gulch. We followed it about a mile and a half to another frame house, once the home of Abe Reid, a rancher-pro prospector who lived in the country for many years. His weather-beaten house was situated just above a clear cold spring, around which apple trees were bursting with bloom. Like the Green House, this place is empty but for occasional overnight occupancy by prospectors and cowboys. Here we left the truck and began our hike.

Bright yellow pieces of garnet, some in beautiful crystal-filled vugs, were scattered among limestone boulders all along Garden Gulch. I picked up two of my most brilliant specimens by examining every likely chunk I saw. These garnets were of a lighter color than those we found up on the hill later.

Garden Gulch slices through well-bedded Tornado limestone of Mississippian and Pennsylvanian age. Since little argillaceous material is found in this bluish-gray rock, it is very resistant to weathering. It has formed sheer walls for the most part along the south side of the canyon. We saw a brown

mountain soil

es of leaf-
n Garden
estination.
wly down
nto Lewis
ween nar-
to Garden

ulch runs
during the
that oozed
enough to
it.

branches of
about an
and caught
the creek.
ended by a
house, still
ch it was

Flaherty
He raised
anyon that
ek Garden
to see the
trees still

nce the ap-
y, a town
s with 139
figure had
8 the two
on ceased
r taught 12
nes a week
d in to the

y and nar-
Gulch. We
d a half to
e the home
spectator who
many years.
was situated
ing, around
arsting with
House, this
asional over-
ectors and
e truck and

garnet, some
vugs, were
e boulders
I picked up
specimens by
unk I saw.
lighter color
on the hill

rough well-
e of Missis-
age. Since
is found in
very re-st-
ormed sheer
ng the south
aw a brown

GAZINE



Lyle Grant stands in the mouth of an abandoned prospect hole which we examined for mineral specimens.

scorpion crawling about in a cavity back in the rock. We were careful after that, for these sharp-tailed denizens of the desert are plentiful in Stanley country.

The north side of the canyon is a series of steep giant stair-steps. The limestone stands up in prominent bare outcrops. Hundreds of dry, dead century plant stalks are standing on the hillside. Many others were beginning to send up the asparagus-like shoots which soon would bear yellow blossoms.

Our search for the garnet veins led us up this steep slope. There were many detours around thorny cacti, Spanish Dagger, and ocotillo traps. We had to stop often and catch our breath. Up ahead we could see the brown earth which indicated garnet country. This characteristic color makes it easy to trace garnet-bearing rocks for two or three miles along the surface of the hills.

Fossils and chert concretions have been found in this limestone formation. We didn't hunt for any, but I've heard that the Stanley country is very fine for such material. I did pick up a piece of pink agatized coral. It showed

very distinctly the circular, radiating coral markings. Indians, I learned, gathered this material to make pink beads which they used as separators between the blue stones of their turquoise necklaces.

After an hour or more of stiff climbing, we topped out in the garnet zone, a contact-metamorphic area in which brown andradite garnet is plentiful. It occurs in massive granular form, with grains as coarse as river sand. Crystals do not occur individually but as complicated, interwoven clusters wherever cavities have permitted them to grow.

The crystals are of the common rhombic dodecahedron form, but they are so closely packed together they seldom show more than two or three complete faces. Now and then with the aid of my magnifying glass, I found crystals that exhibited the combination of rhombic dodecahedron and tetragonal trisectahedron faces.

We did not take time to dig for the large crystals. The small clusters were good enough. We hammered the blocks of massive garnet matrix. In the uncovered vugs, we found beautiful crystals showing perfect rhombic faces. Often we discovered quartz crystals of

various shapes and sizes in the cavities. I found one perfectly formed quartz crystal standing proudly erect in a vug, a specimen which was the find of the day.

We explored ore heaps around prospect holes. The list of minerals observed in the Stanley region by others is very impressive: actinolite in masses of groups of radiating needles from a common center; chlorite in masses of flakes of various sizes; epidote in small crystal groups; fluorite, calcite, specularite, magnetite, pyrite; and copper ores such as malachite, azurite, and cuperite. What more could a collector desire from one region?

None of us was ready for the day's adventures to end, but a lowering sun threw long, warning shadows. Reluctantly we headed for the truck and food. For the first time in six hours we noticed that we were hungry.

Our hunt was ended for this time. We looked over our specimens and wondered about the unfound ones left behind. And by the time the evening campfire was blazing brightly, we were planning another trip to this fascinating land of up and down, of desert and mountain, of geology and mineral treasure.



Arrastre at Garlock, California. The vertical sluiceway in the near wall controlled the flow of thin mud, and the four wooden arms below the bevel gears dragged the grinding stones around on the pavement inside. Ruins of Garlock in the background.

Recovering Gold the Hard Way

Rude drag-stone mills known as arrastres once were a familiar sight in the mine fields of the Southwest. But, after their usefulness had passed, these old mills fell prey to highgraders who dismantled their machinery and swept the stone basins clean of escaped gold dust. Built near an unproductive lode, the arrastre at Garlock, California, promised no such dregs and so survives today as a reminder of the gold heydays of the past.

By POWELL AND EDNA JENKINS
Photographs by the authors

THREE HUNDRED fifty years ago, a burro plodded around a 30-foot circle, drawing a weathered wooden sweep around with him. The sweep operated a grinding mill, and the prospectors who fed ore to be pulverized under its revolving stones were as excited as the burro was indifferent.

The first of these mills was built 350 years ago in barren Mexico and

was given the name, arrastre. In 1850 arrastres appeared in Grass Valley, California, and as early as 1855 they had become important to miners throughout the Southwest. During the years they were used, their circular basins ground out a large proportion of the world's silver and much gold.

Then, by the 1920's, they were gone.

There might be many yet in the des-

ert, but someone too smart for future historians' benefit realized that between the paving blocks of those abandoned arrastres lay escaped trickles of gold. So, for \$50 or \$100 worth of dust, the mills were uprooted, the stones flung about and the wooden sweeps chopped to warm a can of beans.

In spite of the pessimistic observation of one modern historian who said, "There were some (arrastres) to be found as late as the 1920's," several still stand today in moderately good condition on the Mojave Desert.

One is at Garlock, California, hardly 100 feet from a paved highway and only a few miles from Last Chance Canyon, a site familiar to rockhounds. Its fortunate survival is the result of factors which, at the time, must have seemed decidedly unfortunate. It was built after a prospector picked up a

handful of ore flecked with gold. Unfortunately the ore pocket soon pinched out and the mill never was used enough for any amalgam to filter down between the paving rocks. This saved it from later high graders. It remains now very much as it was left, minus a few of the more portable parts, carried off by souvenir hunters.

The Garlock arrastre is so typical it might serve as a textbook illustration of a drag-stone mill. It has a stone and cement basin 13½ feet across inside and two feet deep. Wooden arms pulled heavy granite blocks around on the flat pavement inside. The blocks are still there, complete with thick iron eyes wedged with wood into holes in the stones. Some of the tow chains remain attached. The blocks, the paving and the walls are scoured smooth, and circular scratches indicate the path of the cumbersome grinding stones.

The eyes in the stones were placed so that the blocks slid on the largest plane side and tended to lift over the small, hard pieces of ore. The front edges of the drag stones were rounded also to aid efficient grinding action.

The drag-stone chains generally were spaced on the wooden arms so that one stone swept a current inward and the following one swept outward. Working at from four to a dozen revolutions per minute, the stones might have lasted a couple of months; the pavement itself commonly did not last more than twice that long.

Ore was fed in a little at a time, in pieces ¾ of an inch or smaller, and water was added until, after about six hours, a thin uniform mud was produced. Sufficient mercury to amalgamate all the free gold was mixed in, and grinding continued for several more hours.

Finley Buhn, who came to the region even before gold was found at Randsburg, guessed that the present Garlock arrastre was built about 20 years ago. There had been a very old one on the same site however, probably constructed when gold was discovered in Goler Wash. One of the handworked iron straps has "Made in U.S.A. 1840" stamped on it, suggesting that some pieces of the oldest arrastre were salvaged for successive constructions.

Another easily accessible arrastre stands today in the south end of Panamint Valley seven miles south of Ballarat. It is not as well preserved as the one at Goler, and there is evidence that it has been rebuilt since it was last used. Four or five of the drag-stones are within a few feet of the 12-foot basin, but the drag arms, braces, sweeps and sluice have all vanished.



Above—Little more than the paving remains of this arrastre in Panamint Valley. There is evidence it was rebuilt after last being used.

Below—Although some rocks have been torn up, the pavement in the Garlock arrastre remains almost as level as the day it was laid. Heavy granite drag-stones lie beneath the wooden arms which pulled them around. Several tow chains still are attached to iron eyes firmly pegged into the stones.

Reports Indicate April Best Wildflower Month

Over most of the desert area prospects continue bright for an exceptional wildflower display this season. In southern Arizona and along Highway 80 in California between El Centro and Yuma, verbena and evening primrose were blooming early in March, but in Coachella Valley and on the Mojave desert continued cold winds have retarded the growth until it appears unlikely there will be a general display of color before the end of March or early in April. As this forecast is written, early in March, the dunes in the Coachella area are green with the sprouts of flowering annuals, but peak display of color appeared to be at least three weeks away.

Desert lilies were reported in blossom in the Borrego Badlands early in March, but a few miles farther north in the Mecca area it appeared unlikely the lily would be in general blossom before the end of March.

Desert Magazine's correspondents in various sectors of the Southwest have furnished the following data which will be helpful to those who are planning trips into the desert for the wildflower display.

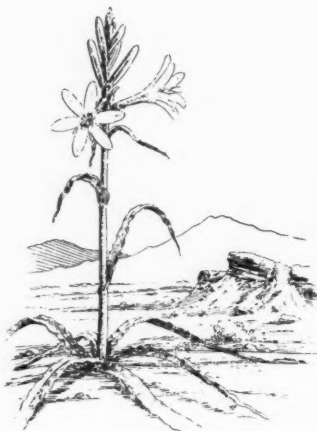
Saguaro National Monument—Brittle bush, desert marigold, bladderpod, jewel flower, alfileria, glogemallow and goldpoppy are reported in blossom. Although very little precipitation occurred during February, Superintendent Samuel A. King is confident several varieties of cholla as well as the hedgehogs will flower during April. "No buds have made their appearance on any of the various species of cacti," he admits, "but the first flowers of the blue yucca were observed February 19."

Casa Grande National Monument—February weather was normal in the Coolidge, Arizona, area, reports A. T. Bicknell, park superintendent, and prospects for a good display continue. Expected to be in fullest flower in March were the California poppy, brittle bush, apricot mallow, ocotillo, scorpion weed, gold fields, gordon bladderpod, evening primrose, fiddle-neck and crownbeard. April should bring blossoms to the staghorn cholla, prickly pear, palo verde, lupine, desert marigold, mesquite and devil's claw. Hedgehogs are expected to bloom by late April.

Lake Mead Recreational Area — "We already have a good flower show," Russell K. Grater, park naturalist,

wrote late in February. "The primroses, phacelia, golden hills and mallow are out, and flowering will become more profuse later in the season." Also anticipated in abundance in April are yellow and white evening primroses, desert marigold, golden hills, sand verbena, desert senna, phacelia, desert chicory, desert dandelion, four o'clock, desert mallow, creosote bush, stickleaf, lupine, sun-ray, bearpaw poppy, yucca, beavertail cactus, barrel cactus and cholla.

Mojave Desert — "Although I am still hopeful for a fine wildflower display, it is not easy to predict the time," writes Mary Beal, desert botanist of Daggett, California. "We have had too much wind and chilly weather to encourage growth; the young plants just snuggle down and wait for warmth. A shower or two would help them along." Miss Beal predicts April and May will be good wildflower months in the Daggett area.



*Lily of the Desert
Wastelands*

Mesa, Arizona — Julian M. King, *Desert* wildflower correspondent at Apache Junction, and Fred Gibson of the Southwestern Arboretum agree the 1952 season, at least three weeks early, will be one of the best in years. "The desert slopes are covered with wild mustard, more than I have ever seen," writes King. "In the Superstition Mountains Indian paint brush is blooming, also wild hyacinths, scarlet bugler, poppies, wild sweet peas and lupine. Many of these varieties are in the open desert and along the road. I expect to see the first cactus blooms by late March. Hedgehogs will be first, promptly followed by staghorns, prickly pears and barrels. In spite of the early

season, palo verde trees probably will not flower before April."

Antelope Valley—Jane S. Pinheiro, well-known in Southern California for her wildflower paintings, reports on the wildflower fields near Lancaster, California. The almond orchards on Quartz Hill reached their blossoming peak March 9 and currant bushes and manzanita show full flowers. Still in the green plant stage, poppies, gilia and buckwheat hold promise for April. Thistle sage, also called Persian Prince, hugs the south slope of Quartz Hill, and the best poppy fields in Southern California—in the Fairmont Hills to the west of the valley—should offer another brilliant carpet this year. To the east, the Hi Vista area promises desert candles or squaw cabbage and large yellow and white primroses, while northern fields beyond Rosamond play host to masses of verbena, larkspur, primroses and gilia. "There will indeed be many flowers," Mrs. Pinheiro promises, "but visitors will have to walk a little farther this year to see the best ones. Miles of new subdivisions have destroyed many of the most accessible fields."

Mojave Desert—Clark W. Mills of Trona, California, also cautions wildflower seekers they will have to hunt harder this year. "Extreme increases in population have nearly ruined wildflower crops along the main highways. With motorists stopping to pick the plants, little is left for seeding subsequent years. However, any of the non-restricted roads off Highway 395 from Kramer's Four Corners north to Brown will take the traveler to a bounteous display." Late in February Panamint Valley slopes showed sprouts of sand verbena, thistle and desert candles. The Randsburg area between Randsburg and Saltdale promises abundant blossoms of coreopsis, sand verbena, thistle, rock asters and mariposa lilies. Reports from Wildrose Canyon indicate that wild roses and Panamint daisies will be at their height from April 15 to May 15. The best display of cactus blooms will be found in the canyons off Searles and Panamint Valleys, where at least 25 varieties of cactus are budding, including the deerhorn, cholla, pear and cottonball.

Joshua Tree National Monument— "In late February and early March the wildflower display was particularly good near Cottonwood Spring," reports Frank R. Givens, superintendent of Joshua Tree National Monument. "However, the plants were rather small in stature, and it was necessary for visitors to walk some distance from the highway to see the best blooms." Barring severe weather in March, Givens assured flower seekers a good display in April.

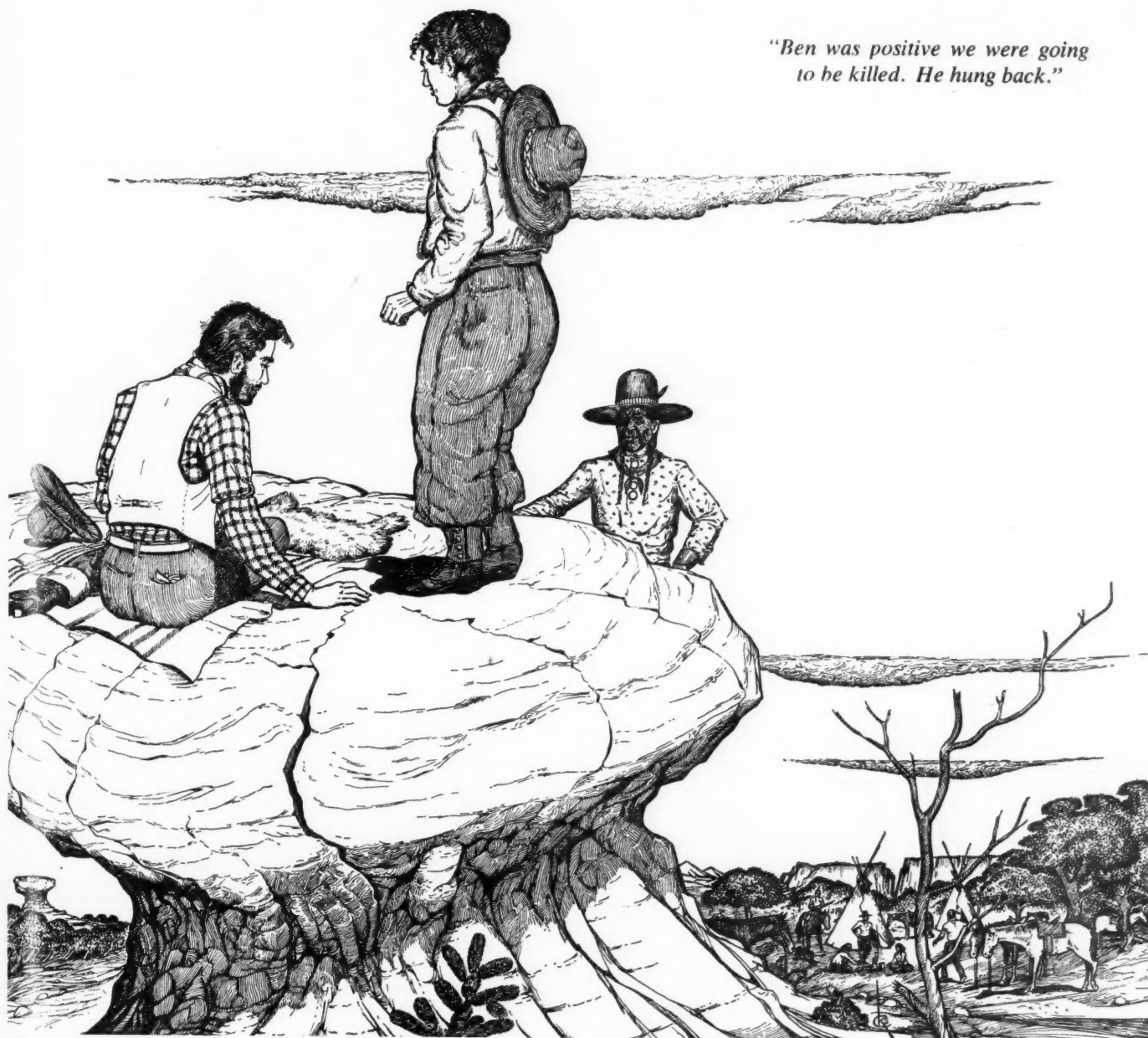
obably will

S. Pinheiro,
California for
reports on
Lancaster;
orchards on
blossoming
bushes and
rs. Still in
ppies, gila
e for April.
sian Prince,
Quartz Hill,
in Southern
nt Hills to
ould offer
s year. To
ea promises
abbage and
roses, while
iamond play
a, larkspur,
will indeed
heiro prom-
e to walk a
ee the best
visions have
t accessible

W. Mills of
utions wild-
ave to hunt
e increases
ruined wild-
n highways.
o pick the
ding subse-
of the non-
y 395 from
th to Brown
a bonteous
y Panamint
uts of sand
ert candles.
een Rands-
es abundant
nd verberna,
riposa lilies.
yon indicate
mint daisies
April 15 to
y of cactus
the canyons
nt Valleys,
es of cactus
e deerhorn,
ll.

Monument—
y March the
particularly
Spring," re-
perintendent
Monument.
rather small
necessary for
istance from
est blooms."
in March,
kers a good

GAZINE



"Ben was positive we were going
to be killed. He hung back."

Prisoners of the Paiutes

For three days and four nights two American archeologists were imprisoned on the top of a mushroom rock while their Indian captors negotiated for the ransom money that would release them. Here is the true story of an amazing episode which took place in a remote sector of the Navajo reservation 55 years ago.

By MARIETTA WETHERILL
as told to Mabel C. Wright

Art sketch by Charles Keetsie Shirley, Navajo artist

IN THE early days of the Southwest that I knew, the term, "kidnapping" was never heard. To be sure, the Indians took women and children, along with horses, sheep and cattle, when they went on raids, but just as part of the loot. There were no forebodings of such an adventure

in January, 1897, as members of our party at Wetherill's Alamo ranch near Mancos, Colorado, made preparations for a scientific expedition to Grand Gulch on the San Juan river in Utah.

Richard Wetherill and I had just returned from our wedding-trip to Mexico. Richard was to be a member

of the party—and of course I would go along. I was no novice in Southwest exploring. I had met my future husband some years before when he had guided my father and our family on similar jaunts. My practical pioneer mother-in-law had made me two pairs of full blue denim bloomers, that stretched modestly to the ankle, where they buttoned. This was long before the day of levis! I topped them off with a curly lamb-skin coat. I was short and roly-poly and I know I must have looked like a plump toad atop my horse.

There were 25 in the expedition, including a professor from the Peabody Museum in Cambridge, Massachusetts; a group of students in arche-



The Wetherills' Alamo Ranch home near Mancos, Colorado. It was from here that the archeological expedition of 1897 started. Picture was taken in 1894. Seated in front of the veranda are Mr. and Mrs. Ben Wetherill. Standing, is their daughter, Mrs. Charlie Mason. The hand-hewn log wing on the right was the original home, built by Ben Wetherill and his son, Richard in 1880.

ology and anthropology from Eastern universities; extra guides to help Mr. Wetherill and his brother, Clayton; packers, cooks, and I, the only woman. We expected to be away at least six months, camping the entire time. No less than a hundred animals were rounded up for the trip—horses, mules and burros. Twenty-two of these horses never saw Mancos again.

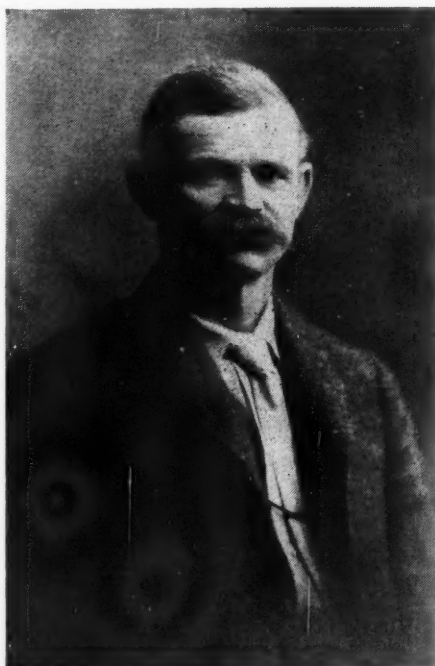
Snow was still on the ground when we started. Travel as far as the little Mormon settlement of Bluff, on the San Juan, was filled with the usual delays and mishaps. We camped there for several weeks while trying to get information on the country ahead. Nothing was known at Bluff about a route to Grand Gulch. Scouts were sent out, only to return with the news that beyond Butler Wash there were no trails. So, as we had often done before, we charted our own way. Into Grand Gulch, to the bottom of the canyon, the going was tough. Pack-loads had to be repacked repeatedly, and in spite of all skill and caution, some animals were lost. I can still hear the piercing scream of a horse, whose pack was too wide to clear a rocky ledge, as he plunged to his death below.

Once down, the campsite was carefully selected. At this season of the year the possibility of flash-floods from arroyos had to be considered. In the three months we were down there, camp was moved numerous times, generally because our work took us farther afield. When we were comfortably settled, reconnoitering for cave-sites

began. They were hidden in the sides of the narrow canyon, not very high up, as they were water-formed caves. We could distinguish the water line on the cliffs, 50 feet above us. There was evidence of vandalism, but apparently no scientific excavating had preceded us.

My duties were comparatively light. I kept notes and took measurements,

This photograph of Richard Wetherill was taken in 1894 — three years before his wife was captured by the Paiutes.



so I was always on the scene when something was discovered. My natural curiosity would have placed me there anyway. We had not been in camp long when we came upon an especially nice cave. Richard started the men to work, but soon grew impatient, and took a shovel himself. He could throw dirt farther and faster than the Yale and Harvard boys, but they had not been doing this sort of thing for years at Mesa Verde and other ruins.

Finally, we had the dirt all cleared out of a circle perhaps eight feet in diameter, which was enclosed by a stone wall two feet high. This seemed to be only a pen for domesticating turkeys, such as we had often found before. However, the digging was resumed and was soon rewarded by the uncovering of a most remarkable mummy. He was wrapped in three feather blankets. The first had just the gray turkey feathers; the second, gray feathers polka-dotted with blue-bird feathers; the third was polka-dotted with canary feathers. The last wrapping was a rare piece of cotton weaving of intricate design in red, yellow, black and white.

But the thing that distinguished this ancient gentleman from so many others, was a deep scar from hip to hip, neatly sewn together with human hair. Healing had started, and we wondered why the surgery had not been successful, until we gently turned him over and found a flint-point in his pelvic bone, two inches from the spine. The surgeon had failed to locate this foreign body in his exploratory operation, and the patient had died. He now rests in the American Museum of Natural History in New York. Years later I took delight in showing the curator there the reason for the deep incision. They had always kept him right side up!

After several months we began planning our departure. Many valuable finds were ready for the difficult job of transportation out of the canyon. We were running out of canvas for wrapping, and more than once we shared our night canvases with a mummy, like the one described above. Science makes strange bed-fellows!

Having nothing to do one afternoon, I got on my horse and rode up on the mesa. As I was coming down the trail toward camp, seven mounted Indians, all young bucks, appeared suddenly from behind rocks and joined me. They asked where I was going, and when I answered that I was headed for our camp, they said they would come along. I thought nothing of it until we came to a place where the trail divided. Then the rider nearest to me threw a rope around my horse's

ne when
My nat-
laced me
been in
upon an
d started
grew in-
nself. He
aster than
but they
t of thing
and other

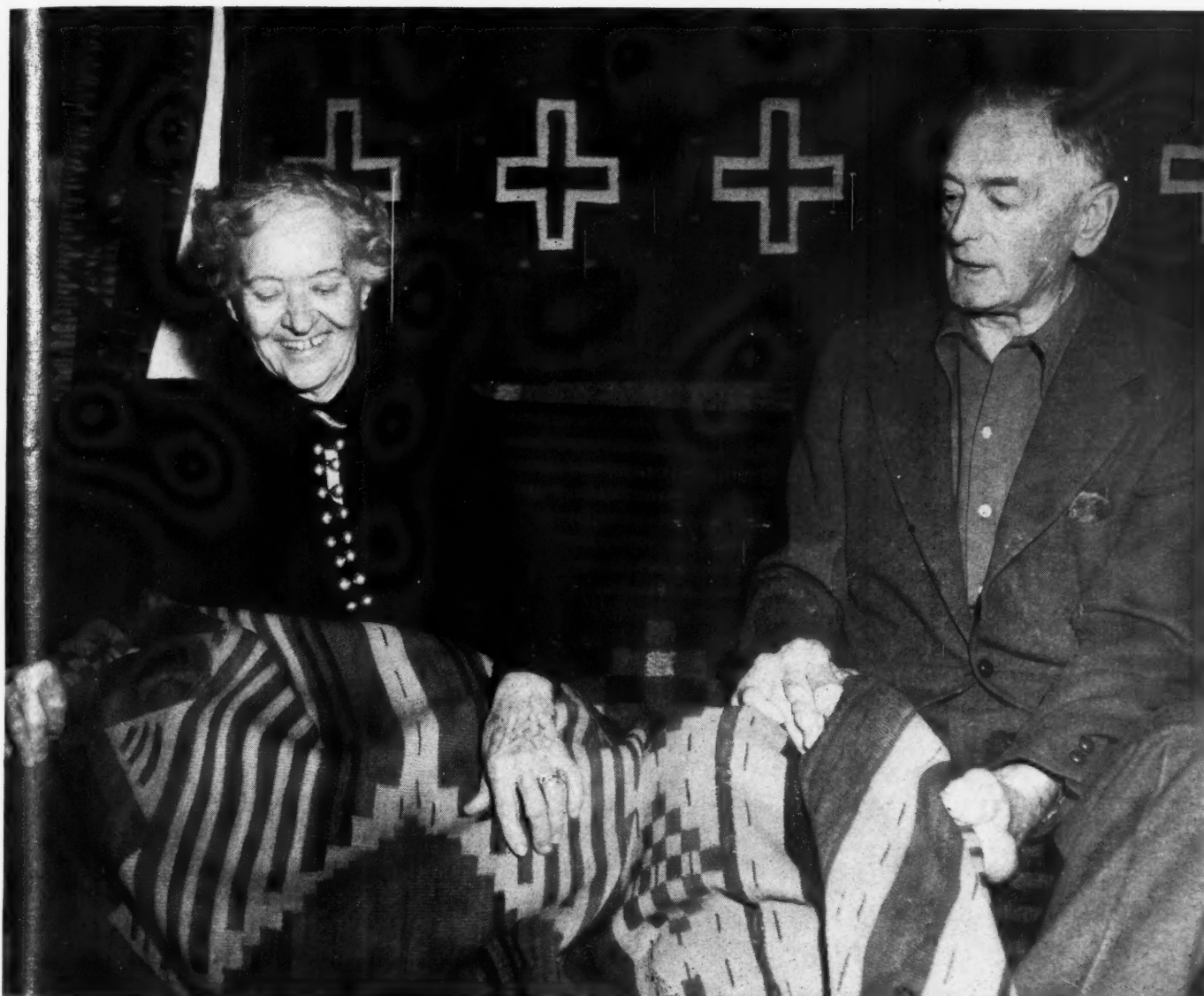
ll clear d
nt feet in
sed by a
is seemed
nesticating
ten found
g was re-
ed by the
emarkable
in three
d just the
ond, gray
blue-bird
lka-dotted
last wrap-
ton weav-
d, yellow,

ished this
any others,
hip, neatly
air. Heal-
dered why
successful,
over and
elvic bone,
The sur-
his foreign
ration, and
ow rests in
atural His-
ater I took
ator there
sion. They
ide up!

we began
Many valu-
he difficult
f the can-
of canvas
an once we
es with a
bed above.
-fellows!

afternoon,
up on the
own the trail
ed Indians,
d suddenly
joined me.
going, and
was healed
they would
thing of it
where the
der nearest
my horse's

GAZINE



*In May, 1951, this picture was taken in Albuquerque of Mrs. Richard Wetherill and Joseph Schmedding, whose recent book, *Cowboy and Indian Trader*, tells about his early life as a cow-puncher for the Wetherills. Photo by C. E. Redman, Albuquerque.*

neck, slipped my Colt .45 from the holster strapped to the saddle-horn, and jerked my horse onto the trail going away from camp. I tried to slip off, but they tied my feet under the horse and away we went!

They spoke Navajo but we always thought that they were Paiutes. I kept asking them where they were taking me.

"To our camp, for money" was the answer. We rode fast, far down along the Elk Mountain Fault. Toward sundown, at the base of a huge mushroom-shaped rock, we came upon their camp. I could see a fire and women cooking but was not given much time to look around. My horse was led over to the rock and I was ordered to climb up.

"But I will be cold and hungry!" I protested.

"You will get sheep-skins and food. Get up there and stay there" and,

significantly, "if you fall off you will get hurt."

Marietta Wetherill, now 76, is a well-known personality in Albuquerque, New Mexico, where she makes her home. So rich are her reminiscences of life in the Old West, and so valuable to history, that Mabel Wright decided to preserve them. This story is one episode in the biography she now is writing. Richard Wetherill was killed by the Navajos at Pueblo Bonito, June 22, 1910, but circumstances of her husband's death have never embittered Mrs. Wetherill against the Navajo; she insists the Indians were inspired by the jealousy of persons in the Indian Service.

I did as I was told, but when I had scrambled to the top, I saw I was not to be alone. Ben Bolton, one of our Harvard students, had already been there several hours. He had been snatched in much the same way as I, and if ever there was a frightened lad, it was he! We were both in our early twenties, but in the four nights and three days on our rocky perch, I had to assume the protective role. My complete confidence in Richard Wetherill's ability to handle any situation gave me courage and, unlike Ben, I was at home among Indians. But this was a long way from the background of that gently nurtured Boston boy. Every book either of us had ever read was retold, every bit of verse recited, every song resung, and we exchanged many experiences from our, so very different, young lives.

Ben was beginning to calm down a



Picture taken in 1890 at Jemez Pueblo of Marietta Palmer, who later became Mrs. Richard Wetherill, and her Indian friend, Rita Ramada.

bit by the fourth morning, when we were aroused by shouts from the camp below.

"Throw down your sheep-skins and come down!" We could see our horses saddled and waiting. Ben was positive that we were going to be killed. He hung back.

"Come on, let's go down. I am sure that it is all right," I told him.

The Indians gave us a good breakfast of corn pone, hand-ground on a stone metate and baked in ashes, together with some weak Arbuckle coffee, and said we were to go back to

our camp the way we had come, along the *tse istqal* (rocks). Our horses needed no urging and hours later we rode into camp. My husband appeared to be alone except for one young buck from our gang of captors. In front of him, Richard asked us both if we had been well-treated or had been hurt in any way. We assured him that we were all right, but that it had been no picnic! Then the buck rode out a short distance, signalled to two others, and they came in for the ransom.

Then I learned of the events since the day of our capture. When it grew

dark and I did not return, Clayton Wetherill started off to find me. He followed my horse's shoe-prints up the trail and back again to where they mingled with the prints of the unshed Indian ponies. Then we went on to the spot where the trail divided and saw moccasin marks. (They were made when a couple of Indians dismounted to tie my feet.) He made a fast dash back with his story. In the meantime, it was noted that Ben also was missing. Two strange Indians quietly joined the excited group in camp and volunteered to race us. They did not want Richard to go with them and it was quite evident they were emissaries. They returned with the ransom demand, \$1000 in silver dollars for each of us. Richard told them he had no such sum on hand but that he would go away and get it. He made it very plain that not one peso would change hands until we were back unharmed.

At once he and Clayton started for Mancos, riding hard, with fresh horses at every stop. At Mancos \$700 was all that could be raised. They went to Durango, where there was a bank. Johnny Kirkpatrick, a well-known mining man, quickly arranged for \$900 more. Back to Grand Gulch rode the two Wetherill brothers with 1600 silver dollars in striped ticking sacks. The \$400 difference was made up in horses, 22 of them. The Indians did not even count the money, but they did much palaver over the horses! Ben's family later repaid the ransom.

As they rode away with their ill-gotten gains that evening, one young buck whose hands I had been sorely tempted to step on as he swung himself off of our rock after bringing up food, (I thought better of it just in time), leaned over from his horse and hissed at me, in passing, "*Lah, chindi yazhe!*" (Goodbye, you little devil!)

We left in a few weeks during which every effort to trace this bunch of renegades was made. My husband had the cooperation of his good friend, Hoskinini, Chief of the Western Navajos, who was deeply chagrined and upset over the incident. They hoped that a clue would come through the horses, but riders and horses had vanished. There was no F.B.I. 54 years ago, and the long arm of the law would never have been long enough to reach into that territory.

I wonder if, somewhere, some time, Ben Bolton has told this tale to his little grandson, and when Georgie asked — "But weren't you terribly scared, Grandfather?" perhaps he replied — "No, indeed, Georgie, Grandfather was not a bit scared. After all, what was there to be scared about?"

Life on the Desert...

Water-witching is a highly controversial subject. Some folks think it works. Others are skeptical. In the files of the Desert Magazine are records of some rather amazing discoveries by water dowzers. Also some records of failure. We're not taking sides. And the accompanying story does not prove anything, although it is a dramatized version of an incident which actually occurred in the Southwest. This is another of the "Life on the Desert" series submitted in Desert's 1951 contest.

By REEVE SPENCER KELLEY
Sketch by Margaret Gerke



"Suddenly Ed stopped. His face became distorted and he seemed to be tugging back at the stick. Betty was determined to pull toward the ground."

MY FATHER didn't believe in water divining, but he finally had to call in Ed Salby anyway; there was nothing else to do. Our back acre was pock-marked with holes, reminders of Father's vain attempts to dig a well. A young college professor had promised we'd find water no farther than 20 feet down, close as we were to the river, and he even suggested where to dig. But he didn't return to the farm when my father wrote him that there was no water on the site he picked.

Ed Salby got out of his battered old pick-up truck slowly. He looked around our farm and sniffed the air as my father and I walked down from the house to meet him.

"Mr. Salby?" said my father.

"That's right! Heard you wanted to find some water up here. Be \$25, after we hit it." He glanced down at me, "Hello, boy!"

I liked him immediately.

Ed sniffed the air again.

"You got water here!" he affirmed.

"Where?" my father asked, his voice sharp with mistrust.

"Soon as I get Betty we'll know. Right now I can only smell it. Good water, too. Betty is my peach tree fork, and she sure can find water! Once she located it, and you ain't never going to believe this, on a map, a hundred miles from this farm. It was old Thompson's place, way up in the hills, and I had the lumbago. So I spread a map of his farm out on the living room table and Betty almost broke out of my grasp a-pointing to where water was on that map!"

I could feel my father's distrust, and see it in his eyes.

"Yep—darndest thing!"

He turned his back on us, reached into the rear of his truck and came up with a battered peach limb, shaped in a fork. The bark had been knocked off in places, and the long end of the fork was covered with dried oil near its tip. Embarrassed, Ed wiped it off with his gloved hand and explained, "Had to use Betty to measure the oil in my car the other night. Sure hope she'll forgive me!"

"Mr. Salby," my father snapped, "can we get down to business?"

"This ain't costin' you a cent, not a cent," said Ed. He looked my father straight in the eyes, his faded blue ones surprisingly steady and strong. "Either I find water or no money changes hands!"

My father backed down a little, "All right, all right, sorry!"

"Now, suppose you and the boy here," he gave me a quick little wink, "lead Betty and me back to the place where you want to find water."

My father went ahead, around the corner of our adobe barn, through a thin strip of tamarisk trees and out onto the dry field. As we followed through the trees Ed put his hand on my shoulder. He didn't say anything, just placed it there. I felt very proud.

"The river gets down too low in the summer," my father said as we came up, "I can irrigate in the spring, but later on the water level gets too low. It would cost me a good deal to pipe it over from the river."

"You mean it's either Betty here, or you lose the farm?" asked Ed.

"I wouldn't say my staying here

depended on a peach fork!" exclaimed my father.

"It does though, it does," said Ed, ignoring the pride in my father's voice, "doesn't it, boy?"

The question startled me, and I said "yes sir" before I thought. My father looked at me in quick surprise.

Suddenly Ed Salby was holding the peach fork in both hands, the stubby part of the limb, below the fork, away from his body. Slowly, not talking, he walked past my father, brushing him as he passed so that my father had to step back. Out onto the dry land he walked, slowly, carefully, holding the fork in advance, his elbows away from his body. My father took a few short steps and stood beside me. Together we watched Ed, his body bent slightly, the wind at his shirt tails, go down the field.

"Craziest thing I ever did, telling Clark down at the store to send him up here!"

"I don't know," I said, "Tommy O'Brien, at school, says he found water for his uncle at Taos."

"You don't believe this stuff, do you, son?"

"Well—sure! What did you have him up for if you didn't think he could do it?"

"I don't know! I just don't know!"

Two hours later Ed was still walking around the field. As my father and I watched, seated on a log now, we heard a twig snap behind us and saw a man in a brown business suit come through the tamarisk trees.

"Howdy! My name is York, Sam

York. I heard Ed Salby—Oh—there he is. Mind if I have a word with him?"

"Help yourself," said my father.

Mr. York walked out to Ed, and they began to talk quietly. Mr. York pulled some papers from his pocket and showed them to Ed. Ed looked back at us several times, rubbed his chin and then seemed to agree to something. Mr. York shook his hand and, nodding to us, disappeared in the direction of the barn, where he probably had parked his car.

After that Ed walked our land with even greater care, especially a little patch of ground where my father hadn't tried for water. Suddenly he stopped. His face became distorted, and the muscles in his arms knotted tight. His hands were trembling and seemed to be tugging back at the stick. We could see it was taking all his effort to hold it level. Betty was determined to pull toward the ground.

We ran to Ed's side. He was on his knees, groaning and straining. Finally the peach fork won, and he fell on his face in the sand. His muffled voice came up to us.

"It's here, your water's here! You can give me the \$25, your water is here!"

My father and I knelt beside him.

"Well—ah, shouldn't we dig? Wasn't that the agreement?"

"You don't have to wait, it's here, and close. Maybe 15 feet!"

My father was impressed, but not enough.

"That close? Are you sure? I'd like to dig, just the same!"

Finally Ed Salby sat up and brushed the dust from his mouth. His blue eyes found my father's brown ones and held.

"You won't be gambling any to pay me now. Didn't you see? Betty pulled me down to it, down as close as she could without dragging me into the earth. You saw, didn't you boy?" He turned his eyes on me, and there was a kind of magic in them.

"I saw, Dad," I said, "I'll pay him from my 4H money, if I can!"

The odds were against my father. He looked back and forth, first at me, then at Ed.

"Okay, come up to the house," he sighed.

Again we went through the tamarisk trees, my father first, then Ed and I, his hand on my shoulder. Father went into our house and came out with a small Indian bowl. From it he took some bills and counted the money into Ed's tough palm. I looked up and saw my mother looking through a window, a worried expression on her face. Ed took the money, holding the peach fork between his knees, counted it and shoved it into his right jacket pocket.

"What if I don't hit water back there?" my father asked.

"You'll hit it!" Ed looked at me, "help him with the hole, boy, you know there's water down there."

So Ed was gone and my father and I went back with shovels and started to dig. Five, ten, 15 feet, the land was as dry as powder and we had gone down exactly where Ed had been forced to the earth by Betty, the peach fork.

"You go in," my father said, "and get yourself some supper. Tell your mother I'll be along."

"I—I—I'm sorry," I said.

My father smiled at me and when he said what he did, I felt very proud of him, "it may be down here yet."

So I went in and ate and darkness came and my mother lit the lamps and finally ate a little food herself.

"Do you think he will find water?"

"Maybe Dad has, already," I said.

"You liked Mr. Salby, didn't you?"

I nodded.

"I don't know. I hope so, but I don't know."

Then the door opened, and there stood my father, a big smile on his face. He wouldn't say a word, just stood there as though we were supposed to tell what he was smiling about. And then I saw. His whole pants legs from the knees down were wet!

"Water, Mother, water! Dad's pants! Water!"

Suddenly we were all dancing around the room and Dad was telling

my mother about the improvements he had planned for the place. He turned to me.

"You thought he'd do it, didn't you?"

"I sure did!" I said.

He put his hand on my shoulder and it felt as good as Ed's.

It was a good well, a wonderful well, and neither my father nor Mr. Tidly, who brought the mail, could figure how we could have missed it; my father had dug all around the spot at one time or another.

A year went by, and one day my father came back from Taos with a funny smile on his face, a queer little pleased smile that I didn't like. He smiled that way all evening, and then that night, after I had gone to bed and was supposed to be asleep, I heard him say to mother as they passed down the hall from the kitchen to the living room.

"... the fellow that came that day, Mr. York, came to tell Ed Salby that he owed \$25 on his car, and if he didn't get in at the office at Taos this Mr. York was going to take the car away. Looks like he found water just in time." My mother laughed, pleased with Father's joke. "Don't tell the boy." He suddenly began talking in whispers just as he closed the living room door.

It took me a day to figure that out, and it was a month before I saw Ed Salby again and then only by luck. I had never seen him in Taos before. He was leaning against a barber shop wall paring his nails.

"Hello, boy. How's the well? Hear you got plenty of water out there!"

"Yeah," I said, more than a little surprised that he knew me.

He poked the point of his knife gently against my jacket.

"I also hear your Dad thinks I was sort of guessing about water on your land!"

I kicked a stone up the sidewalk.

"I guess he does," I said.

"What counts to me, boy is—what do you think?"

"Well—you did find water!"

"Betty found it boy." He put his hand on my shoulder and his pale blue eyes came alive. "It's magic, boy, magic! You believe in magic, don't you?"

I looked into Ed's eyes and it was as easy as pie to believe in magic.

"Sure do!"

"See that field over there—If there was water in that field, I could find it anywhere! You know that, boy—don't you?"

I knew it as sure as I know anything today, and I know it still—"I sure do!" I said.

DEATH VALLEY TOURS
2-Day Week-End Economy Tours
4-Day Expense Paid Luxurious Tours
See your Travel Agent — Write for Folder
A. L. "AL" RIDDLE
operator—Riddle Scenic Tours
Phone VA 3261
Mezzanine—Hayward Hotel, L.A. 14

BRADLEY-REHRIG has ON HAND

FRESH BAKED PIES
FINER GLASS 15¢
14¢
15¢
16¢
17¢
18¢
19¢
20¢
21¢
22¢
23¢
24¢
25¢
26¢
27¢
28¢
29¢
30¢
31¢
32¢
33¢
34¢
35¢
36¢
37¢
38¢
39¢
40¢
41¢
42¢
43¢
44¢
45¢
46¢
47¢
48¢
49¢
50¢
51¢
52¢
53¢
54¢
55¢
56¢
57¢
58¢
59¢
60¢
61¢
62¢
63¢
64¢
65¢
66¢
67¢
68¢
69¢
70¢
71¢
72¢
73¢
74¢
75¢
76¢
77¢
78¢
79¢
80¢
81¢
82¢
83¢
84¢
85¢
86¢
87¢
88¢
89¢
90¢
91¢
92¢
93¢
94¢
95¢
96¢
97¢
98¢
99¢
100¢

BRADLEY-REHRIG
MAIL ORDER—ADD 3% TAX
FRESH BAKED PIES
FINER GLASS 15¢
14¢
15¢
16¢
17¢
18¢
19¢
20¢
21¢
22¢
23¢
24¢
25¢
26¢
27¢
28¢
29¢
30¢
31¢
32¢
33¢
34¢
35¢
36¢
37¢
38¢
39¢
40¢
41¢
42¢
43¢
44¢
45¢
46¢
47¢
48¢
49¢
50¢
51¢
52¢
53¢
54¢
55¢
56¢
57¢
58¢
59¢
60¢
61¢
62¢
63¢
64¢
65¢
66¢
67¢
68¢
69¢
70¢
71¢
72¢
73¢
74¢
75¢
76¢
77¢
78¢
79¢
80¢
81¢
82¢
83¢
84¢
85¢
86¢
87¢
88¢
89¢
90¢
91¢
92¢
93¢
94¢
95¢
96¢
97¢
98¢
99¢
100¢

PICTURES of the MONTH . . .

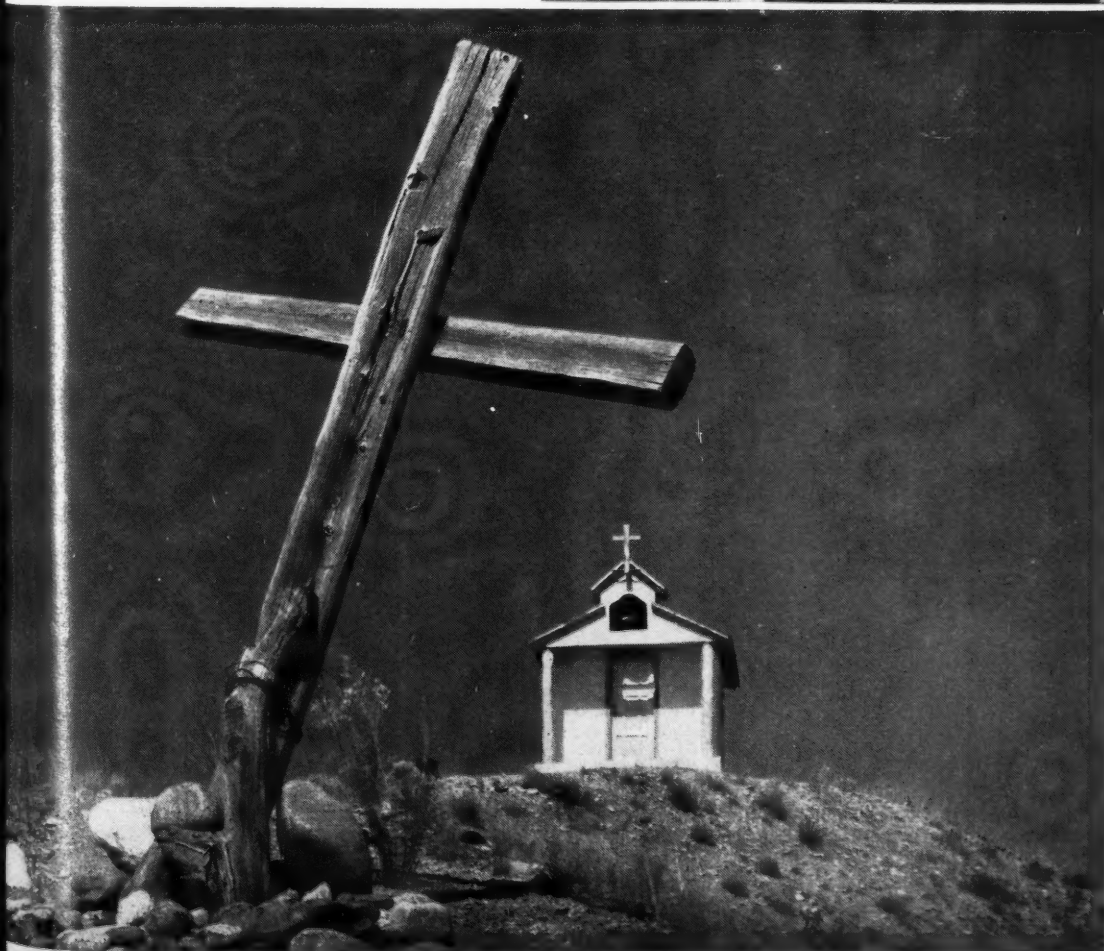
Hopi Dancer . . .

This beautiful Hopi maiden, costumed for the butterfly dance of her tribe, was photographed by Andre de Dienes of Hollywood, California, first prize winner in this month's photo contest. The picture was taken with a Graflex camera, panchromatic film, K1 filter, 1/40th of a second at F 11.



Mission . . .

A rude cross, symbol of the Easter season, stands on a New Mexico hillside. In the background is Chapel Chimayo. The composition won second prize for David L. De Harport of Cambridge, Massachusetts, who used a 3 1/4 x 4 1/4 R. B. Graflex camera and Isopan film.



THE *Desert* MAGAZINE CLOSE-UPS

Reeve Spencer Kelley remembers liking to write imaginative pieces in school. He recalls also that he liked little else about those institutions.

Kelley was born in Willoughby, Ohio, in 1912 and, after high school, wrote reviews for the Willoughby newspaper as well as a few unsuccessful short stories. When his health failed several years ago, he came west to Colorado Springs and again settled down to write, this time trying his hand at verse. He moved to Albuquerque, New Mexico, and his poems began to sell; *New Yorker Magazine*, *The Saturday Evening Post* and other publications liked their light touch of humor.

Only a year ago, Kelley discovered he could write prose—both fiction and factual articles—which was acceptable to editors. Latest proof that he has reached his writing stride is the story of Betty the peachfork and Ed, which won for its author an honorable mention in *Desert's* recent Life on the Desert Contest.

Famous for its wines in the old days, and for its writers and artists today, the old Spanish settlement of Corrales, New Mexico, is home to Mabel C. Wright, author of "Prisoner of the Paiutes." The story was told to her by Mrs. Richard Wetherill, who survived four days on a rocky platform guarded by Indian kidnappers.

Mrs. Wright is fascinated by the life of Marietta Wetherill. "So many have written about the Wetherill men," she says, "it is about time someone wrote a biography of this pioneer woman—who has character and personality all her own."

At present the book is still in note form. Mrs. Wright interviews Mrs. Wetherill whenever she can, recording the latter's knowledge of Navajo arts, beliefs, customs and manner of living. "The writing will come later," she promises.

Mrs. Wright, a Wellesley graduate, and her husband, an eye specialist, have a ranch in Corrales, which is 11 miles north of Albuquerque.

Powell Jenkins, Jr., and his wife, Edna, have lived in, photographed and written about the desert since the Navy first sent him to China Lake Naval Ordnance Training Station, in Inyo County, California, eight years ago. He is now a civilian chemist at the base.

Powell started by writing a column for a Navy paper and progressed to free lance travel features. Edna shares

Hard Rock Shorty of Death Valley



On the shelf in the Inferno store stood a row of fruit jars with crudely hand-lettered labels bearing the information, "Death Valley Honey."

The tourist who had wandered into the store while the clerk was out in front servicing his car was curious. "Where'd you find any honey in this god-forsaken country?" he asked. "What do the bees use for flowers?"

Hard Rock Shorty was seated on the counter with a fly-swatter in his hand, and woe to the fly that made a landing within range of his weapon. Shorty did not like to hear strangers make uncomplimentary remarks about Death Valley. But he kept silent until the visitor repeated his question.

"Plenty o' bees around here," he replied curtly.

"Ol' Pisgah Bill has lot o' hives up Eight Ball crick. Lots o' mesquite trees up there. Mesquite honey's the best in the world," he declared. "Plenty o' flowers up there, too."

"Lots of 'em over in the Panamints, too, but Bill don't go over there any more. Lost all his swarms one spring up in Wild Rose canyon, an' when he got more bees and started again' he put 'em up Eight Ball crick in the Funerals. An' down at the mouth of the canyon he's got a sign that reads 'Artists Keep Out!'"

"Bill's had a special grudge agin artists since he lost all them bees. Happened this way: Bill had eight hives up there and them bees wuz bringing in honey enough to supply all the prospectors in Death Valley and Nevada."

"One day an artist came up in Wild Rose to paint flowers. Pitched a tent up there an' wuz gonna stay two months he said. He wuz a good painter too. Purty soon he had pictures o' them Panamint daisies an' lupine and all the other varieties strung all over that tent."

"Then one day them bees discovered the flowers. Looked so natural the bees came swarmin' in an' they wuz so thick the artist got scared and cranked up his jalopy an' left. Said he'd come back an' get the pictures later."

"Them painted flowers looked more like flowers than the real things, and them dumb-headed bees wouldn't leave. Wuz three weeks before that artist returned—an' them gol-darned bee's 'd stayed there an' tried to get honey outta them paintin's 'till they all starved to death."

in all phases of his writing and camera work—from on-location picture taking to darkroom processing and final typing of manuscripts.

Both the Jenkinses love to tramp the desert country, and occasionally they stumble on material like that which inspired "Recovering Gold the Hard Way," the arrastre story which appears in this issue. Library research follows initial picture and note-taking. But this comes easily to two former University of North Carolina students. Powell received his degree in chemistry in 1943.

Architect, contractor, carpenter, plumber, surveyor, bricklayer, electrician, roofer and painter—these are a few of the jobs Fenton Taylor has had to keep him busy since he last appeared in *Desert Magazine*.

Taylor, a school teacher by profession, did everything but the metal duct

work, plastering and kitchen cabinet construction on the new Taylor home in Thatcher, Arizona. Now comfortably settled, he hopes to find more time to enjoy and write about the geology, botany, wild life and history of the American desert land.

Taylor's first *Desert* story was history ("So They Built Fort Bowie," August 1951). In this issue he enters the field of mineralogy with "Garnets Aplenty at Stanley," which will direct rock hunters to one of the most interesting mineral regions to be found anywhere.

Next month's field trip in *Desert Magazine* will be another of Harold Weight's stories — about an area in Arizona not far from the Colorado River where he found an ancient beach line strewn with pebbles and small boulders which contain many varieties of hard cutting material.

Letters

She Likes Color Covers . . .

Los Angeles, California

Desert:

When I read John M. Thomas' letter in the March issue, in which he says the new full-color *Desert* covers "don't add a cent of value to your publication," I immediately sat down to pen an answer. I most heartily disagree with Reader Thomas!

I think most subscribers who, like myself, love the desert will join me in complimenting you on the color innovation. It adds greatly to the joy of receiving each month's issue. I have the January cover—that lovely sunset—on my living room wall, and everyone who sees it comments on the magnificent color.

For Mr. Thomas' sake, I do hope the addition of color won't boost the subscription price. But for the sake of many other of your readers, please keep up the good work!

MRS. LESLIE SMITH

Petrified Face on Cover . . .

San Bernardino, California

Desert:

Have you noticed the great stone face on the March cover of *Desert Magazine*?

Hold the magazine flat, upside down, and see the face peer up at you from the center of the log end, about six inches from the top. One ear is a lily.

HARRY M. COOK

Whar in Tarnation . . .

Mountain View, California

Desert:

The \$64 question is: "Where is Hard Rock Shorty?"

Did someone put an atomic charge in his pipe? Did the porch of the Inferno store fall down on him? Maybe he got himself drowned by the heavy rainfall in the Valley—or has he merely gone with his friend, Pisgah Bill, to see about filling the Ubehebe Crater for a swimming pool?

Call out the Marines! We want him back!

JAMES B. DOYLE

Yu needn't git so durned het up about it. Me an' Pisgah Bill jes bin settin' here waitin' fer the U. S. an' A. mailman t' come an' collect more of my mer-moires fer Desert Magazine. Tain't our fault he got stuck up there at th' National Monument—plantin' mail order wildflower seeds fer the spring tourists!—H.R.S.

For Want of a Horse . . .

Santa Ana, California

Desert:

I wish I could be in Blanche Bradbury's shoes when her friend next wants to "drag" her off on a field trip! (*Letters*, January, 1952.) It is very hard for me to read about these wonderful desert excursions and not be able to go, for want of transportation. There are so many places I should like to visit!

I love *Desert* and I love the desert country. I only wish I could see more of it!

HELEN L. BROUGH

She'd Heard the Story Before . . .

Valyermo, California

Desert:

Evalyn Slack Gist's story, "Forgotten Mill of the Joshuas," recalled an incident of my first visit to the place where I have lived for 41 years—Valyermo, California.

In March, 1910, traveling by train from Los Angeles to what is now the bustling town of Palmdale, we were met at the station by a lawyer named William Petchner, who drove us by buckboard to the valley which is now our ranch. He knew all the local lore.

When I asked why Palmdale was so named—there wasn't a palm in sight—Mr. Petchner explained. It seemed that in the early days, the tree now commonly known as Joshua was called "yucca palm." The bare desert around the railroad depot had been studded with them, and they gave the town its name.

Our informant then told us the story Mrs. Gist related in the January issue of *Desert*: how a London firm had devastated the region to obtain Joshua wood for paper pulp. Mr. Petchner was so outraged by this destruction, and his language so vivid, that the story has stayed in my memory all these years.

DOROTHY EVANS NOBLE

Traveler Likes Desert Best . . .

Scott Air Force Base, Illinois

Desert:

It certainly is a pleasure to receive my *Desert Magazine* each month. Having been reared on the desert, and a resident of Winslow, Arizona, for many years until my entry into military service in 1936, the desert holds many dear and pleasant memories. Although I have visited quite a few countries throughout the world, I can't get the desert out of my system.

If any of my friends happen to read this, I would appreciate hearing from them, particularly Eon C. Lucas, who first introduced me to *Desert Magazine*.

FRED L. STOUT

Moonlight Rainbow . . .

Yucca Valley, California

Desert:

Dropping into the Coachella Valley from the canyon below Morongo, we often stop to admire the string of bright jewels which adorns the valley at night—lights of her baby cities.

We were driving north from Desert Hot Springs the night of February 9, about 8:45 p.m., when a most unusual phenomenon appeared to delight us—a rainbow by moonlight!

The widest rainbow I have ever seen, of softly glowing pastel colors, formed a perfect arch from the base of snow-capped San Jacinto to the foot of even whiter San Geronio. It bridged the Devil's Cactus Garden at the north end of the valley.

Behind us the bright moon rode high, casting fascinating shadows on the foothills. Ahead, the stormclouds were advancing from the coast, to envelop the San Geronio range. Against the background of black clouds and white mountains, the gorgeous night rainbow shone. It remained until we disappeared into the narrow, twisting canyon.

JENNIE VEE EMLONG

Impish Indian Mermaid . . .

Yuma, Arizona

Desert:

On a hot Sunday afternoon last June, while walking through the brush toward the Colorado River, I was startled to hear what sounded like a cry for help. I rushed to the water's edge and saw a tiny brown figure apparently struggling in the center of the river—at a spot which I knew to be at least six feet deep and more than 75 feet from either shore.

Clad in trunks, I had but to slip off my shoes before diving into the warm water. I swam as fast as I could, but by the time I reached the spot where the youngster had been, I saw that I might as well have saved my breath; the young swimmer was already across on the other side, clambering onto a sand bar to join her Indian friends.

That was my first introduction to Carolyn Curran, whose picture appears with that of the "Padre of the Papago Trails" in the February issue of *Desert*. She had not called for help at all. When I reached the sand bar, she, her older brother, Jerome, 12, and the brothers Rudolph and Randolph Yuma, ages 11 and 12, were busy constructing a small tower of rich sandy river silt. They were just upstream and in the shadow of the Highway 80 bridge. Here the river is especially dangerous, due to treacherous whirlpools caused by large rocks under the water's surface.

All summer long these children

spend about half their time in the river. Little Dana (Junior), whose toothsome grin also is prominent in the picture, swims with his sister, who at that time was just five years old. Being only four, Junior hasn't tried to swim across the river—not yet. However, on a number of occasions I have seen him swimming alone in deep water as far as 25 feet from shore.

If you don't believe this, come to Yuma in the summer, and I'll have my young friends give you a swimming lesson. Or just ask Father Bonaventure, and he will tell you that many of the Indian babies learn to swim as they are learning to walk. Their mothers come to the river to bathe them and, at the same time, to swim as relief from the heat.

P. A. BIRDICK

Mr. Carpenter Is Found . . .

Huntington Park, California

Desert:

In the February issue of *Desert Magazine* appeared a letter from John A. Husava of Monrovia, California. Mr. Husava asked for information about a certain Harry Carpenter, who discovered some guano caves along the Colorado River.

The article Mr. Husava referred to was published in *Arizona Highways*

magazine, June 1951 issue, under the title, "Black Gold." The author, Russell K. Grater, reported that Harold Carpenter of Boulder City, Nevada, discovered the cave and explored it quite extensively. Walter Swartz of Boulder City is present operator of the project.

HERMAN B. KEYS

Los Angeles, California

Desert:

John Husava inquired about one Harry Carpenter and his guano project on the Colorado River. A Harold Carpenter should be remembered by workmen at the boat docks on Lake Mead, where he worked on a sailing boat, the *Loki*.

The similarity of given names is probably a trick of memory.

EARL A. TAYLOR

Mill Valley, California

Desert:

There is an abandoned guano mine very close to the power line road running from Parker Dam north to Boulder City. It is not far from the west bank of the river, a short distance south of Chemehuevi Valley, approximately 600 feet from the road. When traveling north, it is on the left, in plain view of the road.

Any lineman in Gene Camp, dis-

trict headquarters of the Metropolitan Water District, can supply mileage figures.

PAUL J. LINSLEY

Boulder City, Nevada

Desert:

Harry Carpenter, of guano caves fame, now operates a tire repair shop at Indian Springs, Nevada.

TIM HARNEDY

Mr. Husava received more than 28 replies to his letter. To settle all doubts, a postcard came from Harold Carpenter himself. He wrote — "I have heard someone was looking for me."—R. H.

Remembers Governor Hunt . . .

Orange, California

Desert:

I was much impressed with the story, "Padre of the Papago Trails" in the February issue of *Desert*. I lived in Globe, Arizona, before Arizona became a state, and I knew Governor Hunt, whose picture appears with the story, very well. At that time he ran the Old Dominion store and bank. After becoming governor, he visited Globe often.

GEORGE BICKFORD

Pardon Us, Philadelphia . . .

Philadelphia, Pennsylvania

Desert:

Each month when *Desert Magazine* arrives, I become restless and homesick for California. My toes just itch for the warm desert sand, and I long to be under those sunny blue skies. Pardon me, Philadelphia, but this is a dreary, damp, smoky, noisy place. City folks miss so much in life and yet seem unaware of it.

But I don't need to sell you on the desert! I only wish I could be there now.

KATHARINE W. GEARHART

Answers an Old Question . . .

El Cajon, California

Desert:

Quite a while ago, I read in *Desert* about someone finding evidence of a house and corral in Painted Gorge, north of Coyote Wells in California's Coyote Mountains. (*Letters*, January 1945.) He wondered what they meant.

In 1916, and for a few years following, a company in Fullerton, California, took sand from Coyote Mountain to Coyote Wells and from there shipped it to Fullerton to make glass. A cook house and a corral were built at the head of the canyon, and there was a well. Another canyon went north into the open desert, with a marble quarry up it about 2 miles.

Petrified wood could be found on side canyons off Painted Gorge.


C. H. MACK

*this is the place
for your Desert Fun...*

and now is the season.

Swim, play or loaf in the heart of the great Anza Desert State Park and enjoy better-than-ever cuisine and service . . . easy on your budget. Double rates from \$10 European.

See your favorite travel agent, write direct, or phone Borrego 10.



BORREGO
Desert Resort
formerly Hobergs

BORREGO SPRINGS, CALIFORNIA

Here and There - on the Desert

ARIZONA

Mountain Park Plans Ready . . .

TUCSON—Final plans have been completed for the Arizona Desert Botanical and Zoological Gardens, and work on the first phase of the half-million dollar project is scheduled to start April 1. The institution will be located in the Tucson Mountain Park. Initial concern will be construction of the small-animals section.

When completed, the park will contain a complete collection of living desert plants, ranging from trees and shrubs to cacti, and a cross-section of living animals including mammals, birds, reptiles and insects. There will be mineral, rock and mining exhibits and a Papago Indian display. The finished project will cover all 30,000 acres of the park.—*Tucson Daily Citizen*.

Stahnke Asks Scorpion Sum . . .

PHOENIX—Dr. Herbert L. Stahnke has asked the Arizona legislature for \$2,710 to manufacture scorpion serum. With the money, Stahnke told committeemen, it will be possible to blanket the state with scorpion serum by summer and begin manufacture of next year's supply. "Dozens of Arizona children's lives may be saved," he said. The sting of certain species of scorpion, if untreated, is often fatal to children, only painful to adults.

In listing his expenses, Stahnke told of the need for scorpion caretakers, who feed the insects cockroaches and look to their general welfare; scorpion milkers, who perform the delicate and somewhat dangerous operation of extracting the venom; processors who inject the venom into cats and extract the cats' antivenom, and animal caretakers who care for the cats. Nearly half of the requested appropriation would be used to purchase supplies.—*Tucson Daily Citizen*.

10-Year Dry Spell About Over . . .

PHOENIX—With run-off from Arizona streams one of the greatest the state has enjoyed since 1916, the agriculture department predicted that Arizona's 10-year dry spell was nearly at an end. H. B. Peterson of the federal department of agriculture said the runoff which is indicated for the spring months would add about 400,000 acre-feet of water to that already stored in Arizona reservoirs. Rain and snow-fall during December and January would revive long-dry springs and raise the groundwater table considerably.—*Tucson Daily Citizen*.

Renew Labor Agreement . . .

WASHINGTON — Less than 24 hours before it was scheduled to expire, the migratory labor agreement between the United States and Mexico was renewed for 90 days. Mexican farm laborers are brought to this country under terms of the pact, and the renewal was urged by both governments so that there would be no interruption in the program. The U. S. State Department has indicated it will not negotiate a new pact until Congress enacts legislation imposing stiff penalties for importing or harboring Mexicans in this country illegally. The Senate already has passed a bill making it a felony to aid or abet a wetback's entry and a felony to shelter or move wetbacks once they are across the border.—*Riverside Enterprise*.

Yuma Sunshine 94 Percent Perfect . . .

YUMA—With 249 clear days, 73 partly cloudy and 43 cloudy days, Yuma enjoyed 94 percent of possible sunshine during 1951. The figure was calculated by Sherd T. Baldwin, meteorologist at the U. S. Weather Bureau Station on the Yuma Mesa. Total rainfall was 2.95 inches, there were 10 thunderstorms and three days on which heavy fogs were recorded.—*Yuma Daily Sun*.

To Change Papago Law Code . . .

TUCSON—"When the day of integration comes, the Papago must not be at a loss to understand the laws of the nation and the state. If he has lived for a period under similar laws administered by his own people and the Papago tribal court, there will be little friction when the laws become one law—that of any American citizen."

With these words, Thomas Segundo, chairman of the Papago tribal council, opened conferences directed toward making tribal laws conform more closely to criminal and civil codes of white Americans. The law and order committee of the Papago tribal court is revising the code with assistance from William Benge, director of law and order for the U. S. Bureau of Indian Affairs.—*Tucson Daily Citizen*.

Study Three Indian Bills . . .

PHOENIX — Three bills affecting the lives of Arizona Indians have been introduced in the 20th state legislature. One would allow Indians to obtain and use firearms off the reservation; a second would repeal state laws prohibiting



on the train...as at home



Only on the train can you enjoy the restful pleasure of a roomy, full-length bed, in your berth or private room... as you roll swiftly through the night to your destination. Daytime, your room becomes your home—or office!... another reason for making your next trip East by train... by Union Pacific!

FOUR FAST TRAINS EAST

Streamliners

"CITY OF LOS ANGELES"
"CITY OF ST. LOUIS"

★
**LOS ANGELES LIMITED
PONY EXPRESS**

16 Ticket Offices in Southern California
to serve you, including—

LOS ANGELES: 434 West Sixth Street or
Union Station • TRinity 9211

HOLLYWOOD: 6702 Hollywood Blvd.
Hillside 0221

BEVERLY HILLS: 9571 Wilshire Blvd.
CR 1-7167, BR 2-1633

Be Specific—Go

**UNION
PACIFIC**



THE DESERT TRADING POST

Classified Advertising in This Section Costs 8c a Word, \$1.00 Minimum Per Issue

INDIAN GOODS

FOUR PERFECT AND FINE Indian Arrowheads \$1.00. 2 large arrowheads \$1.00; extra fine stone tomahawk \$2.00; 4 beautiful bird arrowheads \$1.00; 2 flint knives \$1.00; fine effigy peace pipe \$8.00; bone fish hook \$2.00; 6" or over spearhead \$5.00, thin and perfect. List Free. Lear's, Glenwood, Arkansas.

WE SEARCH UNCEASINGLY for old and rare Indian Artifacts, but seldom accumulate a large assortment. Collectors seem as eager to possess them as their original owners. To those who like real Indian things, a hearty welcome. You too may find here something you have long desired. We are continually increasing our stock with the finest in Navajo rugs, Indian baskets, and hand-made jewelry. Daniels Trading Post, 401 W. Foothill Blvd., Fontana, California.

FOR SALE: Finest collection of Indian baskets, beaded bags, ivory cribbage boards etc. 2319 Henry St., Bellingham, Washington.

BOOKS — MAGAZINES

BOOKS FOUND: Any subject, any author. Fast service. Send wants—no obligation. International Bookfinders. Box 3003-D, Beverly Hills, California.

PANNING GOLD — Another hobby for Rock Hounds and Desert Roamers. A new booklet, "What the Beginner Needs to Know," 36 pages of instructions; also catalogue of mining books and prospectors' supplies, maps of where to go and blue prints of hand machines you can build. Mailed postpaid 25c, coin or stamps. Old Prospector, Box 729, Desk 5, Lodi, Calif.

BUSINESS OPPORTUNITIES

FOR SALE: Gold mine near Riverside, California. Have \$3222.00 in it. What am I offered? B. C. Dawson, 13353 Gager St., Pacoima, California.

DESERT TEA BUSINESS FOR SALE, or trade. Too much other business is reason for selling. Located at Amboy, California. Inquire at 140E 4th St., San Bernardino, California. Janie Baker.

ROCKHOUNDS ATTENTION — Best growing business location for sale with full stock of finest specimens—over 4000 varieties from all over the world. Good home with finest water and plentiful. World's best climate. Over five years in business. Disabled WW I veteran, needs money. See or write H. P. Williams, Box 36, Quartzite, Arizona.

FABULOUS EARNINGS — Fascinating pastime. Growing Genuine, living miniature (Ming) Trees. New Sensational Business or Hobby. Astounding information FREE. Dwarf Gardens, Box 355N, Briggs Station, Los Angeles 48, California.

FOR SALE

Excellent Income Property

Includes six apartments, completely furnished, one bedroom home-office.

Near Shadow Mountain Club
Located right on highway 111 in
Palm Desert

Write to
Box 53
Palm Desert, California

REAL ESTATE

HOT MINERAL WATER! Imagine your own swimming pool—heated by Nature! Five acres of beautiful desert land, near surfaced road, with a good Hot Well—only \$5000. Doctors and arthritics, especially, should investigate this. Located just 13 miles Northeast of Palm Springs. R. H. McDonald, Desert Hot Springs, California.

WILL SELL 5-acre patented Jackrabbit Homestead 15 miles from Palm Springs, 4 miles from Palm Desert, 2 miles from Palms-to-Pines Highway in Section 36. Elevation about 1000 feet. Has good 22-foot house trailer on cement block foundation. Two double beds. On hillside overlooking lower Cat canyon. No electricity, necessary to haul water. \$1600 terms. Discount for cash. Address Owner, Box HR, c/o Desert Magazine, Palm Desert, California.

SCENIC VIRGIN DESERT and mountain area, 26 miles west of El Centro on Highway 80. Abundance of sunshine and good water. Two highway junctions, 1 to Calexico on Mexican border, the other to Agua Caliente Hot Springs, Railroad; Cafe started, Motel and Trailer Court needed. Residential lots \$200. Business from \$300 up. Mutual water rights \$50.00. Send for circular. John C. Chalupnik, Alpine, California.

MISCELLANEOUS

CRAFTSMEN—HOBBYISTS—COLLECTORS — Desert woods for sale. Fascinating, beautiful, different. Ironwood, screwbean mesquite, catpala, cholla cactus. All wood is personally selected and best grade obtainable. All grow in desert only. Excellent for use as veneer, inlays, lamps, book-ends, bowls and many other things. I use it to make the above things myself and have seen no other woods to compare with these. Ironwood \$2.00 sq. ft. All other including cholla cactus veneer ready to apply \$1.00 sq. ft. F.O.B. Minimum order \$5.00. Specializing in woods from the desert. If it grows in the desert I have it or can get it. David R. Jones—the Woodologist, P. O. Box 1028, Palm Springs, California.

SAVE 50% on New Binoculars! Free catalog. Free book, "How to Select Binoculars." Write today! Bushnell's 43-D 34, 43 E. Green Street, Pasadena 1, California.

DESERT TEA. One pound one dollar postpaid. Greasewood Greenhouses, Lenwood, Barstow, California

SILVERY DESERT HOLLY PLANTS: One dollar each postpaid. Greasewood Greenhouses, Lenwood, Barstow, California.

COLOR SLIDES: Photomicrographs of rare types of Agate. World Travels; Grand Canyon, Petrified Forest, Yosemite, Carlsbad Caverns, White Sands, Indian Ruins, Big Bend, Bryce, Zion, Wild Flowers, cacti, reptiles. Four samples 2x2 or stereo and literature, \$1.00. Dave Harris, 2401 Pittsburg, El Paso, Texas.

PEN AND INK sketch of your own house or other subject on your personal stationery. Samples 10c credited on order. Tift, 411 Tift Road, Dover, New Hampshire.

PROSPECTORS AND ROCKHOUNDS WANTED. To join the newly incorporated United Prospectors Organization. If you are experienced or beginners the articles in our magazine are bound to help you enjoy your hobby and the outdoors. Send your name for our new brochure and literature. United Prospectors, Box 729, Lodi, California.

FIND YOUR OWN beautiful Gold nuggets! It's fun! Beginners illustrated instruction book \$1.00. Gold pan, \$2.00. Where to go? Gold placer maps, Southern California, Nevada, Arizona, \$1.00 each state. All three maps \$2.00. Desert Jim, Box 604 Stockton, Calif. California.

LADY GODIVA "The World's Finest Beautifier." For women who wish to become beautiful, for women who wish to remain beautiful. An outstanding desert cream. For information, write or call Lola Barnes, 963 No. Oakland, Pasadena 6, Calif. or phone SYcamore 4-2378.

the sale of liquor to Indians, and the third would create a commission of Indian affairs to study ways of absorbing the Indian people into the economy of the state.

The old statute prohibiting the sale of guns and ammunition to Indians was enacted during the time of the Apache wars. "The law should be repealed now that the Indians and the government are at peace and have been for more than 70 years," declared Sen. William A. Sullivan, who sponsored the proposed substitute bill. Repeal of the liquor law has long been urged by Indians, who claim it is "outright racial discrimination and forces Indians to obtain their liquor illegally." —*Tucson Daily Citizen*.

WINDOW ROCK — Hildegard Thompson, former director of Navajo schools, took office in February as Chief, Branch of Education, Bureau of Indian affairs. Mrs. Thompson was appointed by Secretary of the Interior Oscar L. Chapman to succeed Willard W. Beatty.

CALIFORNIA

Strange Fish Protected . . .

DEATH VALLEY — The government has acted to preserve a unique species of minnows, described as "desert pupfish," which has lived in a Nevada desert pool since the end of the Ice Age. Presidential proclamation recently established the pool, Devils Hole in Southwestern Nevada, as part of Death Valley National Monument.

Dr. Carl Hubbs, professor of biology at the University of California Scripps School of Oceanography, La Jolla, said the pool is a remnant of a prehistoric chain of lakes which in the moist late glacial, or Pleistocene epoch formed the Death Valley lake system. The Scripps biologist is convinced that the pupfish have the smallest range of any distinct species of vertebrate animals, the pool in which they live measuring only 40 feet long and 15 feet wide. The little fish are believed to be one of the least populous of any species, their total number ranging between 50 and 100. The population presumably has not changed in size in the 11,000 years since the end of the Ice Age.

Glen Vargas, amateur naturalist and geologist of Indio, California, has found fish also in the hot mineral well near Mecca and at Dos Palmas spring in the Coachella Valley. The largest specimen he studied measured no more than two inches long. "Its ancestors were originally inhabitants of the waters of the Colorado River," explained Vargas. "As these lakes dried up the fish took refuge in the springs in Death Valley and elsewhere in the Southwest." —*Indio News*.

, and the
mission of
of absorb-
economy

g the sale
o Indians
ne of the
uld be re-
s and the
have been
clared Sen.
sponsored
. Repeal
een urged
"outright
forces In-
illegally.'

Hildegard
of Navajo
bruary as
n, Bureau
apson was
e Interior
ed Willard

e govern-
a unique
d as "des-
l in a Ne-
end of the
ation re-
evils Hole
s part of
ument.

of biology
ia Scripps
Jolla, said
prehistoric
moist late
h formed
tem. The
d that the
nge of any
e animals,
measuring
wide. The
one of the
cies, their
en 50 and
mably has
0,000 years

.
uralist and
ornia, has
ineral well
as spring
he largest
d no more
ancestors
s of the
river," e-
akes dried
springs n
ere in the

GAZINE

Secession Move Gains Support . . .

PALM SPRINGS—Warning Coachella Valley residents if they want to secede from Riverside County, "the time to act is now, while tax conditions are favorable to such a move," Homer Varner, Riverside County supervisor of the desert area, addressed a general meeting of the Palm Springs Civic League. The league, and representatives of other desert communities, had gathered to discuss the possibilities of forming a new Desert County. "The first part—getting 65 percent of the desert area vote—is easy," said Varner, "but getting 50 percent of the population around Riverside to favor our secession will require a lot of sound educational work." The desert area includes 75 percent of Riverside County land, pays 40 percent of its taxes and has about 33 percent of its population. Yet this area has but one supervisor whereas the remainder of the county has four supervisors.—*Desert Sun*.

Salton Park Lands Leased . . .

INDIO—After four years of delay, investigation, lease negotiations and correspondence between state and federal governments, the State Division of Beaches and Parks has announced execution of a lease on a section of land for development as Salton Sea State Park. However, unless development money can be inserted in this year's budget, it will be necessary to wait until the 1953-54 budget is adopted before work is begun. If the item is given approval by the 1953 legislature, money would be available July 1, 1954. Thus, conceivably, work could be delayed until 1955.—*Date Palm*.

Choose River Park Sites . . .

BLYTHE—Three sites on the Colorado River have been chosen by the State Division of Parks and Beaches for park development. Selected are the area around Quien Sabe Point, 24 miles north of Blythe; a section of river frontage just north of the Blythe-Ehrenberg bridge; and an area near the Palo Verde irrigation district intake.—*Palo Verde Valley Times*.

Date Pioneer Passes . . .

INDIO—Dr. Walter Swingle, who introduced early importations of date palms to the Coachella Valley, died January 19 in Washington, D. C. As a result of importations made by Dr. Swingle, an agricultural explorer, an experimental garden was established at Mecca in 1904. In 1907 the U. S. Date Gardens were established near Indio, and for 25 years studies were conducted at both stations. Swingle was in charge a good part of that time.—*Indio News*.

APRIL, 1952



JUDD HOLDEN TAKES HIS CAR UP THE FARGO STREET HILL IN LOS ANGELES—A 32% GRADE OFTEN USED FOR PERFORMANCE TESTS. HIS ENGINE PERFORMED PERFECTLY BECAUSE HE FOLLOWED TWO SIMPLE RULES.

HOW TO GET TOP PERFORMANCE FROM YOUR CAR

If every motorist would test his car's performance as Judd Holden is doing above, America's automobiles would be kept in better shape. Today's cars normally perform well even at 75% of their capability. As a result, thousands of car owners are driving the streets completely *unaware* that their engine is not giving them full performance. You paid for 100% performance, so why not get it? Just follow the two simple rules demonstrated below.



RULE NO. 1 for 100% performance: Take your car to your car dealer's for frequent checkups—at least every 2,000 miles. His mechanics are factory-trained experts.



RULE NO. 2: Use the finest motor oil money can buy. Leading car manufacturers specify heavy-duty type oils. The finest of these is Royal Triton—the famous purple oil recommended by leading car dealers.



Royal Triton is available at leading car dealers' in most areas of the United States.

UNION OIL COMPANY OF CALIFORNIA

LOS ANGELES, Union Oil Bldg. • NEW YORK, 4904 R C A Bldg. • CHICAGO, 1612 Bankers Bldg. • NEW ORLEANS, 917 National Bank of Commerce Bldg.



Palm Desert VIEW LOTS \$1100.00

Just above Art Gallery
East of Shadow Mountain Club
Near School, Church, Shops
Paved Streets, Water, Electricity,
Gas. Many homes already built.
Overlooking Coachella
Valley Date Gardens

for information write
CARL HENDERSON
Pioneer Realtor
PALM DESERT, CALIFORNIA

"EVERYTHING FOR THE HIKER"

SLEEPING BAGS
AIR MATTRESSES
SMALL TENTS

and many other items

VAN DEGRIFT'S HIKE HUT

717 West Seventh Street
LOS ANGELES 14, CALIFORNIA

Rest and play in

THE VALLEY OF ENCHANTMENT SKY-HI
C BAR H
DOUBLE J
EL SUENO
MUFFIN MOUNTAIN
MOTEL
Write direct to any of
the Four Guest Ranches
for information.
Illustrated folders
Address: Lucerne Valley, California

HAVASU CANYON "GEM OF THE GRAND CANYON"

Land of the Havasupai Indians—the natural wilderness beauty of an enchanting land—off the beaten track. Mixed parties being organized now for Spring.

Minimum Trip, 8 days, including Transportation From \$115

Write for literature, details & reservations

WAMPLER TRAIL TRIPS
1940 Hearst Ave. Berkeley 9, California



1000 TRAVEL SCENES
COLOR SLIDES
FOR YOUR
VACATION RECORD

FREE LIST
SAMPLES 30c WRITE TODAY

KELLY D. CHODA
BOX 5 LOS ALAMOS, NEW MEX.

Mojave Indians Let Lands . . .

NEEDLES — At a meeting in Needles, the Mojave Indian Tribal Council signed final papers leasing 11,000 acres of tribal lands to the Mojave Valley Farms Company. The 10-year lease carries water rights of Indian lands, which insures water from wells and the Colorado River. A 30,000-acre program is planned. The tribe will receive \$5,500 per year for the first five years and a more substantial sum for the latter half of the lease period.—*Desert Star*.

Oldest Resident, 127, Dies . . .

INDIO — Louis Levi, Indian who claimed to be Coachella Valley's oldest inhabitant and perhaps the world's oldest human, died in January on the Torres Indian Reservation. Levi, a member of the Mission Tribe, claimed to be 127 at the time of his death. Rev. Felix Collymore of Our Lady of Soleidad Church, who conducted funeral services, said he had every reason to believe Levi was that old since his parents had been converted to the Catholic faith through the works of Father Junipero Serra, who died in 1784.—*Date Palm*.

Cancel Mecca Easter Pageant . . .

INDIO—Due to flood damage, decreased financial support and lack of technical assistance, the Mecca Civic Council contemplated cancelling the 1952 Easter Pageant in Box Canyon. "Flood water damage to the permanent installations at the site has been heavy this year," said Shaler Wilder, council secretary, "and, although in past years excellent support had been obtained among volunteer actors and directors, an apparent lack of technical assistance and a decrease in financial support have thrown a heavy burden on those responsible for the 1952 production." The pageant "The Master Passes By," was first presented April 21, 1946.—*Indio News*.

NEVADA

Water Picture Bright . . .

BOULDER CITY—Expecting one of the largest Colorado River spring run-offs on record, the Bureau of Reclamation stepped up power production at Boulder, Davis and Parker power plants in order to provide ample flood storage capacity in Lake Mead and, at the same time, to generate hydroelectric energy for the Pacific Southwest.

TRUE OR FALSE

This month's True or False will not be especially difficult for those who have an intimate knowledge of the desert and its history. But the tenderfoot who gets 12 of them correct will be doing very well. Twelve to 14 is a fair score, 15 to 17 is good, 18 or more is excellent. The answers are on page 34.

- 1—A stand of beehives is known as a lapidary. True..... False.....
- 2—The fangs of a rattlesnake are in its lower jaw. True..... False.....
- 3—The Hassayampa River in Arizona is a tributary of the Gila River. True..... False.....
- 4—Chief Winnemucca was an Apache Indian. True..... False.....
- 5—Barstow, California, is on the banks of the Mojave River. True..... False.....
- 6—Largest city in Arizona is Tucson. True..... False.....
- 7—The trading post at Cameron, Arizona, overlooks the Grand Canyon of the Colorado. True..... False.....
- 8—The commanding officer of the Mormon battalion on its trek to the West Coast was Capt. Cooke. True..... False.....
- 9—Showlow is the name of a town in New Mexico. True..... False.....
- 10—The only difference between an amethyst crystal and a quartz crystal is its color. True..... False.....
- 11—A Navajo hogan generally faces east. True..... False.....
- 12—The blossom of the mescal or wild century plant is yellow. True..... False.....
- 13—Homes of the pueblo Indians are never more than one story high. True..... False.....
- 14—A horned toad is a reptile. True..... False.....
- 15—Raton Pass is one of the gateways into Death Valley. True..... False.....
- 16—A U. S. mint was once located at Carson City, Nevada. True..... False.....
- 17—George Wharton James wrote the book, *Wonders of the Colorado Desert*. True..... False.....
- 18—Furnace Creek Inn is the home of Death Valley Scotty. True..... False.....
- 19—Dinosaur National Monument is approximately east of the Wasatch Mountains. True..... False.....
- 20—The Evening Primrose which grows on the desert is an annual which reseeds itself. True..... False.....

As a result of heavy snowfall throughout the state, Nevada's 1952 water picture is the brightest it has been in years. In February surveys, Donner Summit snow showed almost triple the 30-year average of water content; Spring Mountains hold more than twice as much as normal; and water content in the upper Humboldt courses is at least double normal. "Extended drouths in east-central and southern Nevada have at least been interrupted," reported the Nevada Cooperative Snow Committee.—*Las Vegas Review-Journal*.

Deepest Snow in 20 Years . . .

AUSTIN—Deepest snow drifts in 20 years along highways and roads in January briefly shut Austin away from travel, supplies and mail. Every available piece of road working equipment was put to work clearing highways.

Stages could not get through for several days, and by Thursday noon Austin still was hopefully waiting for Saturday's mail.—*Reese River Revue*.

Power Hopes Dim . . .

LAS VEGAS—"All power available to the state of Nevada from Boulder and Davis Dams is now under contract to lessees at Basic Magnesium Plant and the three prime contractors. No more can be secured unless the Bridge and Glen Canyon Dams can be unhooked from the Central Arizona project, or power is brought in from California sources." This was the statement made by A. J. Shaver, chief engineer for the Colorado River Commission, at a hearing by the Southern Nevada Power Company before the Public Service Commission. Shaver pointed to the fact that Southern Ne-

vada made application in 1941 for 4,000,000 kilowatt hours of power, and that in 1952 it applied for 263,000,000 KWH, indicating a tremendous growth in population. "There wasn't anyone, back in 1941, who thought the state of Nevada ever would be able to use the amount of power which was allocated to the state by the Boulder Canyon pact," he said.—*Pi-oche Record*.

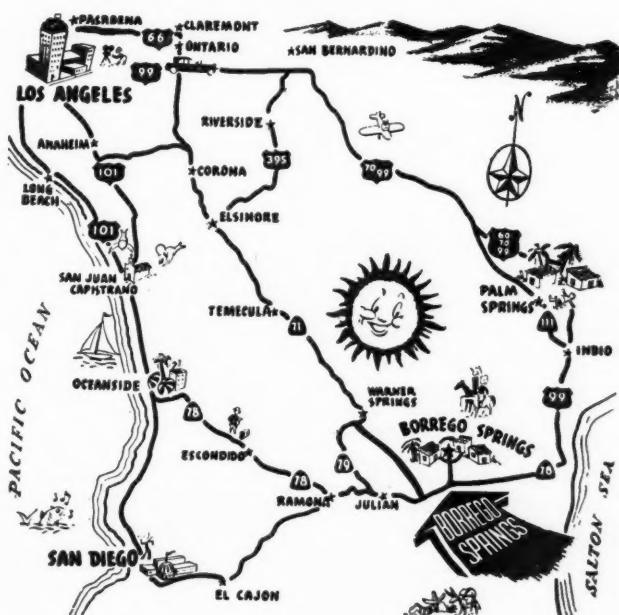
Supplies Dropped to Indians . . .

FALLON—A group of Paiute and Shoshone Indians, isolated since early fall at Summit Lake in northern Humboldt County, had the coast guard to thank for food, clothing and medical supplies dropped by plane when provisions ran low. A four-engine craft dropped more than 400 pounds of supplies to the 12 snowbound Indians.—*Tucson Daily Citizen*.

Borrogo Bill Says--



"Everything Under the Sun"



. . . and I'm not kiddin'.

You should see our beautiful BORREGO SPRINGS and find YOUR PLACE IN THE SUN! Really, it's the desert that's different. The home of health and relaxation. Now is the time for you to become part of BORREGO'S golden future.

And you can still buy

ESTATES . . . RANCHOS . . . HOMESITES and INCOME PROPERTIES at PRE-INFLATION PRICES in BORREGO SPRINGS.

Insure a secure, happy future of inexpensive luxury. Where nature is kindest . . . in beautiful BORREGO SPRINGS. For a colorful folder that tells ALL about BORREGO, Write or phone—

BORREGO SPRINGS COMPANY

6250 WILSHIRE BOULEVARD, LOS ANGELES 48

YORK 7286

Ancient Indian Basket Found . . .

BOULDER CITY—An ancient Indian basket—large, with a cupped rim and made of coarse materials—was found in a cave on the shore of Lake Mojave by Murl Emery of Eldorado. Exact location of the find is not being revealed, pending arrival of Al Schroeder, National park service archeologist, who will classify it. After Schroeder's examination, the basket will be brought to the Park Service museum at Boulder City. Russell Grater, naturalist at Lake Mead Recreational Area, said the basket may be either Paiute or Mojave, as the tribes interlapped in this area.—*Las Vegas Review-Journal*.

New Test Site Operators . . .

YUCCA FLAT—A new concern, The Nevada Company, has taken over operation and maintenance of the Nevada test site of the Atomic Energy Commission at Yucca Flat. The new company is headed by John McGrath,

who formerly was personnel and labor relations director for Haddock Engineers, Ltd., which previously had charge of the site. Revelation of the transfer came during an inquiry regarding labor conditions at the site. Denying reports of labor difficulties, McGrath said the Nevada Company was paying overtime wages in accordance with union contracts and was having no trouble whatever in maintaining sufficient working staffs.—*Las Vegas Review-Journal*.

Trailer Accommodations . . .

BOULDER CITY—To provide facilities in the Lake Mead National Recreational Area for an ever-increasing number of trailer visitors, the National Park Service is planning a new trailer camp in the Boulder Beach area. Superintendent George F. Baggeley has called for applications from persons interested in establishing a concessioner owned and operated trailer camp. It is expected that the initial development will provide for 50 trailer sites, with provision for expansion as the demand requires.

BOULDER CITY — Contract for construction of the new National Park

Service administration building at Lake Mead National Recreational Area was let late in January. George Baggeley, park superintendent, expected building to begin in mid-February.—*Las Vegas Review-Journal*.

NEW MEXICO

Students Hunt Villa's Gold . . .

ALBUQUERQUE—Equipped with a map which a physician told them he had received from a grateful Mexican patient, seven University of New Mexico students set out to find Pancho Villa's buried gold. History records that the famous guerrilla army leader accumulated an immense gold fortune in several raids, including the 1916 raid on Columbus, New Mexico. It was at that time that Americans under General John J. Pershing unsuccessfully chased Villa through the Mexican badlands for four months. Periodic searches have been made since Villa was shot from ambush at Parral, Mexico, in 1923. — *Las Vegas Review-Journal*.

Rain-Making Declared Failure . . .

GALLUP—Man-made rain experiments in the eight western states were failures, according to reports made to

VACATION in WAYNE WONDERLAND with JACKSON'S SCENIC TOURS

Sightseeing, picture taking, rock hunting, camping and deer hunting in October.

Regular weekly tours over Thousand Lake Mt. to Cathedral Valley, Painted Desert, Pinto Hills, Dirty Devil R., Land of the Goblins, and San Rafael Swell or Capitol Reef.

Spl. Tours—Standing Rock Basin, Colo. River or anywhere in Scenic Southern Utah.

For information or reservations write to:

J. WORTHEN JACKSON
Fremont, Utah



Spectacular Rainbow Bridge

Take the thrilling ride on horseback into the scenic desert wilderness of southern Utah — to America's greatest natural bridge. Comfortable lodging. Good food.

For rates and information write to

RAINBOW LODGE, TONALEA, ARIZONA

Season opens April 1



World's Greatest BINOCULAR

See 33 Models
NEW FREE CATALOG!

**SAVE 50%
And More**

\$14.95 UP

30 Day FREE Trial

Guaranteed to give you more and save you money on every popular model. Don't overpay! Compare BUSHNELL'S before you buy. Send for FREE CATALOG and Free Book "How To Select Binoculars".

BUSHNELL Binoculars Dept. D-44 Bushnell Building Pasadena 1, Calif.

April Best Month for Pictures . . .

April is always a good month for taking pictures on the desert—and this year, with the promise of a gorgeous display of wildflowers, it will be better than normal. While it is true that the wildflower display on the desert lowlands probably will have passed the peak by April 1, at elevations between 2000 and 4000 feet the blossoms will be at their best. Flowers are just one of many subjects available for desert photographers. Any typically desert setting is eligible — landscapes, ghost towns, sunsets, wildlife, human interest and unusual rock formations.

Desert Magazine's Picture-of-the-Month contest is designed to secure for publication the best of the pictures taken in the desert country each month by both amateur and professional photographers. All Desert readers are invited to enter their best work in this contest.

Entries for the April contest must be in the Desert Magazine office, Palm Desert, California, by April 20, and the winning prints will appear in the June issue. Pictures which arrive too late for one contest are held over for the next month. First prize is \$10; second prize \$5.00. For non-winning pictures accepted for publication \$3.00 each will be paid.

HERE ARE THE RULES

- 1—Prints for monthly contests must be black and white, 5x7 or larger, printed on glossy paper.
- 2—Each photograph submitted should be fully labeled as to subject, time and place. Also technical data: camera, shutter speed, hour of day, etc.
- 3—PRINTS WILL BE RETURNED WHEN RETURN POSTAGE IS ENCLOSED.
- 4—All entries must be in the Desert Magazine office by the 20th of the contest month.
- 5—Contests are open to both amateur and professional photographers. Desert Magazine requires first publication rights only of prize winning pictures.
- 6—Time and place of photograph are immaterial, except that it must be from the desert Southwest.
- 7—Judges will be selected from Desert's editorial staff, and awards will be made immediately after the close of the contest each month.

Address All Entries to Photo Editor

The Desert Magazine

PALM DESERT, CALIFORNIA

g at Lake
Area was
Baggley,
d building
Las Vegas

pped with
d them he
Mexican
New Mex-
d Pancho
y records
my leader
d fortune
the 1916
Mexico. It
ans under
unsucces-
e Mexican
Periodic
ince Villa
rral, Mex-
s Review-

ure . . .
in experi-
ates were
s made to

esert—
lowers,
display
April 1,
at their
ert pho-
scapes,
al rock

d to se-
country
rs. All
est.

agazine
y prints
for one
second
n \$3.00

printed
me and
CLOSED.
contest

Desert
from the
e made

FORNIA

GAZINE

the annual meeting of the American Meteorological Society in sessions in New York. E. J. Workman of the New Mexico Institute of Mining and Technology, said that silver iodide had failed to increase rain; in fact, it actually decreased precipitation. Workman advocated much more research into the practicability of rain-making. — *Humboldt Star*.

Asks Indian Fund Hike . . .

WASHINGTON—In his budget request to Congress, President Truman asked \$121,350,000 for the Indian Affairs Bureau to spend during the year beginning July 1. This is \$50,979,088 more than the \$70,370,912 appropriated during the year ending June 30. Largest request is for \$61,905,000 for Indian health, education and welfare services, \$20,080,250 more than the amount spent last year. More money will be needed, the bureau said, "for placing more children in school, serving more patients in hospitals and accelerating relocation of Indians away from overcrowded reservations." More than \$30,000,000 was asked for the Navahopi rehabilitation program. — *Gallup Independent*.

Training Program Launched . . .

WINDOW ROCK — The first American apprenticeship system in history has been launched for Navajos and Hopis in the Window Rock area. The plan is part of the 10-year, \$88,000,000 Navajo and Hopi rehabilitation program. It will provide on-the-job training for qualified Navajos and Hopis at various construction sites in the area. In addition, the government will sponsor parallel courses of instruction at night, to fill in background for the Indian students. The training periods will last from a few months to two years. — *Gallup Independent*.

Navajo End Record Session . . .

WINDOW ROCK — Setting a new record for the number of days spent in one session, the Navajo tribal council ended an 11-day meeting with plans for a Washington visit. A 10-man delegation will travel to the capitol to keep Navajo problems before Congress and to attempt to obtain more funds. Among resolutions passed on the final day of the session were: action to obtain a business manager; move to buy \$45,000 worth of radio equipment to be used by forestry and law enforcement officers on the reservation; and discussion of possibilities for reactivating the chapter system, which was started in the late 1930's to give the Navajos an opportunity to make their individual views known. — *Gallup Independent*.

UTAH

"Blind" Sheep Puzzle Ranchers . . .

SALT LAKE CITY—Big, rugged Rambouillet sheep have long been a favorite breed with western range men. But among their weaknesses is a susceptibility to "wool blindness" caused by a heavy growth of wool around the eyes. The blindness makes it difficult for the sheep to find feed, and it upsets them emotionally, making them flighty and nervous. All this has an adverse effect on wool, meat and lamb production. In an effort to produce an open-faced strain which will not be troubled with blindness, the Utah State Agricultural College bought a handsome Rambouillet ram for a special research project. Highly interested in the project are Utah wool growers who examined the animal during their annual convention in January. — *Salt Lake Tribune*.

Drouth Relief Forseen . . .

SALT LAKE CITY—Further indications that current precipitation records will materially relieve drouth conditions in southern Utah were noted in January flow records of the San Juan River. Run-off of the San Juan at Bluff was 223 percent of normal. "This is the first time in two years the river has developed above normal run-off for a full month," said Milton T. Wilson, U. S. Geological Survey district engineer. Stream flow in northern Utah continued above normal. — *Salt Lake Tribune*.

Plan Longest Span Bridge . . .

MOAB—An artist's sketch of what

will be the longest over-water structure on the Utah highway system—a new \$1,000,000 bridge over the Colorado River—has been completed by the State Road Commission. The concrete-and-steel span will cross the river north of Moab on U. S. Highway 160. "Since the development of uranium deposits in southeastern Utah and the increase in heavy truck travel on the highways serving the area, the old 16-ton capacity bridge has become increasingly dangerous and inadequate," said E. G. Johnson, commission chief engineer. Although funds for the Moab bridge have not yet been allocated, engineering specifications are being rushed to completion by the commission. — *Moab Times-Independent*.

EXPLORATION! SAFE ADVENTURE! SCENIC BEAUTY!



SAN JUAN and COLORADO RIVER EXPEDITIONS

Seven-day voyage through the scenic canyon wonderland of Utah and Arizona.

Boats leaving Mexican Hat, Utah, May 1, May 11, May 26, June 4, June 16, June 26. Trips end at Lee's Ferry. One post-season run between Hite, Utah and Lee's Ferry, Arizona.

Fare: \$200 for one person, \$175 each for two. Larger group prices, also rates for other trips given on request.

" . . . A flight on the magic carpet of adventure into a canyon wilderness of indescribable beauty and grandeur." wrote Randall Henderson in the *Desert Magazine*.

For detailed information write to—
J. Frank Wright, Blanding, Utah, or

Mexican Hat Expeditions

(Successors to Nevills Expeditions, world-famous River exploration trips)

P. O. BLUFF, UTAH

LOST DESERT GOLD

A 72 pp. science-fiction booklet on the Colorado Desert and Pegleg's gold

Postpaid \$1.10

RALPH L. CAINE

P. O. Box 17162, Foy Sta.
Los Angeles, California



Mother Lode Map — Plus Gold Nuggets

Gold nuggets panned from streams in California and Old Hank's colorful, unusual story map — "The Golden Trail of the Mother Lode." Stories of the '49ers, ghost towns, over 45 pictures and illustrations. Explore this amazing trail taken by the early gold seekers in their search for treasure. The map is \$1.00. One gold nugget and map, \$2.00; four gold nuggets and map, \$3.00. Postpaid prices. A "different" gift from the West. Send order to—

OLD HANK

P. O. Box 2462, San Francisco 26, California

Grand Vacations

*Into a Land of Great Beauty
Journeys by Boat — Wyoming,
Colorado, Utah, Arizona, Nevada.*

Rendezvous: Richfield, Utah

162 miles of Colorado River

NO RAPIDS

HITE, Utah to LEE'S FERRY, Arizona

Schedule:

April 27 to May 3

May 11 to May 17

May 25 to May 31

June 8 to June 14

\$125.00 Fare on above

Rendezvous: For fast water run. CLIFF DWELLERS LODGE, Arizona. Through Monument Valley by cars, a 230 mile overland trip.

Down San Juan-Colorado Rivers, BLUFF, Utah to LEE'S FERRY, Arizona. 225 miles by water in row boats.

Schedule:

June 22 to June 30

\$175.00 Fare for 9-days

Above trips visit RAINBOW BRIDGE

Announcing: GRAND CANYON TRAVERSE

July 15 to August 14

LEE'S FERRY to BOULDER CITY

Announcing: GREEN-COLORADO RUN

August 24 to September 30

Launch: GREEN RIVER, Wyoming

Land: LEE'S FERRY, Arizona.

LARABEE AND ALESON

WESTERN RIVER TOURS

RICHFIELD, UTAH

Tribe Accepts Oil Bonus . . .

SALT LAKE CITY — The Ute-Ouray Indian Tribal Council has accepted a \$456,414 bid by oil and gas companies for rights to explore on 7019 acres of tribal property in eastern Duchesne County. It was the biggest bonus money offering for such small tribal acreage ever made in the history of the state. The land is near the Duchesne area where two wildcat companies have made commercial discoveries of oil.—*Salt Lake Tribune.*

To Introduce Echo Bill . . .

VERNAL — Representative Walter K. Granger of Utah has announced he will introduce a bill to authorize construction of Echo Park Dam as soon as possible in the current Congressional session. The plan cannot be

presented until approved by the Bureau of the Budget. According to Granger, Bureau of Reclamation officials are backing the dam, and Secretary of the Interior Oscar L. Chapman remains in support in the absence of an equally favorable substitute site. Stumbling block among administration agencies which might force rejection by the Budget Bureau is the objection of the Army Engineers, who believe the project is economically unfeasible because of "unrealistic estimates of prospective irrigation revenues." Even if the authorization bill is passed, no appropriation for actual construction could be made until next year.—*Vernal Express.*

Nuisance Deer Doomed . . .

OREM — Everybody agreed they had to go. Sportsmen, landowners and members of the state fish and game department had discussed the problem thoroughly and reluctantly decided there was nothing else to do. The nuisance deer at the foot of Mt. Timpanogos were doing thousands of dollars worth of damage to orchards and crops. For weeks eight herders hired by the fish and game department with orchard owners and volunteer sportsmen had attempted to drive the deer out of the orchards at night. The marauders always returned. Finally Warden Charlie Breder of Provo organized an execution party. Nine men went out several nights one week and killed approximately 100 of the intruders. Next year it is expected that an extended hunt of some type will be held in the area to allow sportsmen to take more deer and in this more ideal manner reduce the nuisance problem.—*Salt Lake Tribune.*

"OVERLOOKED FORTUNES"

In the Rarer Minerals

Find war minerals! Here are a few of the 40 or more strategic rarer minerals which you may be overlooking in the hills or in that mine or prospect hole: columbium, tantalum, uranium, vanadium, tungsten, nickel, cobalt, bismuth, palladium, iridium, osmium, platinum, rhodium, ruthenium, titanium, tin, molybdenum, selenium, germanium, manganese, cadmium, thallium, antimony, mercury, chromium, etc. Prices booming; many much more valuable than a gold mine: cassiterite now \$1000 a ton; bismuth \$1500 a ton; columbite \$2500 a ton; tantalite or microlite \$5000 a ton; tungsten \$3 pound; platinum \$90 ounce, etc. Now you can learn what they are, how to find, identify and cash in upon them. Send for free copy "overlooked fortunes"—it may lead to knowledge which may make you rich! A penny postcard will do.

Duke's Research Laboratory

Box 666, Dept. B, Hot Springs, New Mexico

ASK YOUR CONTRACTOR ABOUT "PRECISION BUILT"

RED CINDER BLOCKS



Homes of Distinction

are built with

You'll have year
around comfort
with

"Precision Built"
RED CINDER OR
PUMICE BLOCKS

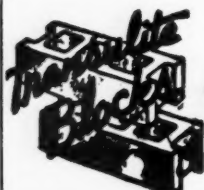
. . .

**PLANS AVAILABLE
DESERT CINDER BLOCKS FOR
DESERT HOMES**

TRANSIT MIXED CONCRETE CO.

3464 E. Foothill Blvd., Pasadena 8
RYAN 1-6329 or Corona Phone 1340

More
House
For
Your
Money



TRUE OR FALSE

Questions are on page 30

- 1—False. A lapidary is one who cuts and polishes gem stones.
- 2—False. The fangs of a rattler are in its upper jaw.
- 3—True.
- 4—False. Chief Winnemucca was a Paiute Indian.
- 5—True.
- 6—False. Phoenix is the largest city in Arizona.
- 7—False. Cameron Trading Post overlooks the Little Colorado River.
- 8—True.
- 9—False. Showlow is in Arizona.
- 10—True. 11—True. 12—True.
- 13—False. Pueblo Indians often build two or three stories high, or even higher.
- 14—True.
- 15—False. Raton Pass is in New Mexico.
- 16—True. 17—True.
- 18—False. Death Valley Scotty's home is a little cabin near Scotty's Castle.
- 19—True. 20—True.

Mines and Mining

Tucson, Arizona . . .

Plans for mining a large deposit of low-grade copper ore in the Catalina Mountains have been announced by officials of the newly organized Arizona Copper Mines, Inc. The mining property, located in the Old Hat mining district 20 miles north of Tucson, is expected to develop into an extensive operation. The total ore body is believed to contain approximately 100,000,000 tons of low-grade ore.—*Mining Record*.

Winnemucca, Nevada . . .

One of the important ore strikes made in Nevada in past years is the discovery of pitchblende ore, a rich uranium product, made by Ed Bottomley, Lovelock metallurgist, and Gus Rogers, veteran Winnemucca mining operator. Prospecting and development work was carried on for nearly three years before any public announcement was made. The discovery was at once covered with six mining locations which have been transferred to the recently organized Nevada Uranium Company. Development work now is following a 30-inch vein of high grade pitchblende-uranium ore.—*Pioche Record*.

Washington, D. C. . . .

More than a quarter of a million dollars was paid out last year to uranium ore producers under the new incentive bonus program of the Atomic Energy Commission. The graduated bonus arrangement, based on uranium oxide content of the ore, was established in June, retroactive to March 1, 1951. Payments have resulted in a sizeable increase in the income of many small mining operators and have stepped up output of this raw material for the atomic energy program. The money is paid directly to the producers and is in addition to established prices paid by the various processing plants and purchasing stations. — *San Juan Record*.

Golconda, Nevada . . .

A 75-foot ledge of high grade manganese ore has been uncovered at the Black Diablo property, 21 miles south of Golconda. Announcement of the find was made by C. G. Brailey, superintendent and vice-president of the Charleston Hill National Mining Company, owners of the site. Manganese has been shipped from the Black Diablo to Geneva, Utah, since 1939.—*Humboldt Star*.

Tonopah, Nevada . . .

A strike of silver ore at the Mohawk mine, at Argentite out of Silver Peak, has been drifted on for a length of more than 150 feet. The vein is the full width of the six-foot tunnel all of the way, and where it has been cross-cut it is more than 12 feet wide. It is said to average 42 ounces of silver for the entire length and includes some lead.—*Pioche Record*.

Tonopah, Nevada . . .

With the initial trial run producing 27 tons of lead bullion, operation was begun recently of the Lippincott lead smelter at Bonnie Clare in Nye County. Capacity of the plant is 100 tons of ore per 24 hours, and bullion recovery is one ton per hour. Operation of the smelter is said to be the preliminary step in construction of a \$250,000 plant, which eventually will include a 100-ton selective flotation mill for lead-silver ores, sintering plant for heavy sulphide ores and facilities for smelting mill concentrates to produce lead-silver bullion.—*Mining Record*.

Salt Lake City, Utah . . .

Contracts have been signed between Morgan-Walton Oil and Gas, Inc., and Three States Natural Gas Company for multi-million dollar development of natural gas properties in Carbon, Emery and Sanpete counties. Production would be allotted to the Utah Natural Gas Company, which plans a \$32,000,000 transmission line from Boundary Buttes, San Juan County, to Salt Lake City. The three-year program calls for wildcat tests on the Clear Creek, Carbon County, gas field; the Flat Canyon structure in Carbon and Emery counties; the Northeast Scofield structure, Carbon county; and two tests, one to the north and the other to the south, on the 70,000-acre Joes Valley structure in Sanpete and Carbon counties.—*Salt Lake Tribune*.

Benson, Arizona . . .

Coronado Copper and Zinc Company has plans to continue its Moore shaft at Johnson Mine, east of Benson, another 200 feet. The 3-year-old shaft already has been sunk 500 feet. Only the Moore and the old Republic shaft, down 1600 feet, are now being worked at Johnson, a former copper and zinc boom town. A mill is in operation, making copper and zinc concentrates; the former is shipped to Inspiration, the latter to Bartlesville, Okla.—*Tombstone Epitaph*.

Goldfield, Nevada . . .

A 20-ton silver-lead custom mill is reported under construction at Silver Peak, 32 miles west of Goldfield. The mill, owned by E. R. Hines of Chicago, replaces one that burned a few years ago. Mines active in the area include the Nivloc and the Argentite. The McNamara shaft, which has been inactive for some time, is being put back into operation and is showing an average of 15 percent lead and .8 ounces of silver.—*Humboldt Star*.

Delta, Utah . . .

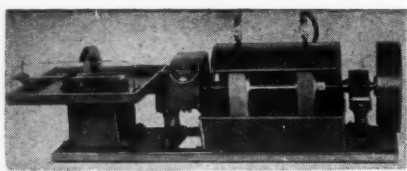
An access road to Staats Fluorspar mine, Juab County, will soon be built, according to information received by Fred Staats, who operates the property in partnership with Frank Lowder and Harold A. Stephensen. The area to be serviced by the road is 50 to 55 miles northwest of Delta, and the principal mineral is fluorspar.—*Millard County Chronicle*.

Vernal, Utah . . .

Oil and Gas Journal, publication of the petroleum industry, has estimated 71 new wells will be drilled in Utah in 1952. This figure includes wildcats and field wells drilled at Red Wash, Roosevelt Pool and Duchesne Field, all in the Uintah Basin. The *Journal* said the forecast is based on drilling schedules of oil companies and individual operators. The 71-well program may be compared with 39 wells completed in 1951. Of these, eight were successful in finding oil, one found natural gas and 30 were dry holes.—*Vernal Express*.

Winnemucca, Nevada . . .

Development of one of Nevada's most historic mines is being pushed by a group of Salt Lake mining men after surface stripping uncovered a 210-foot long vein of cinabar. The property, being developed by the Dutch Flat Mines, Inc., consists of 19 unpatented lode claims and two unpatented placer claims. The claims lie in the bottom and sides of Idaho Gulch in the Paradise mining district of Humboldt County, 29 miles northeast of Winnemucca. Although worked primarily as a placer and lode gold producer, the properties were worked during World War II for the mercury content with an estimated 30,000 pounds being recovered. Officers of the company plan to develop the cinabar deposits immediately by sinking an inclined shaft to connect with two present shafts which have been used to work deposits at the intersections of a series of north-east-trending fissures with a northwest-trending fault zone about 100 feet in width.—*Humboldt Star*.

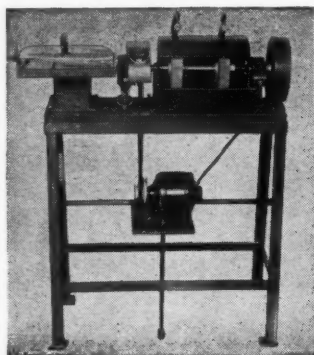


E-10 — TABLE MODEL

Complete with 8-in. Felker Diamond saw, 1½-in. 100-grit and 220-grit grinding wheels, leather covered buff, sanding disc and vise with 1½-in. cross-feed.

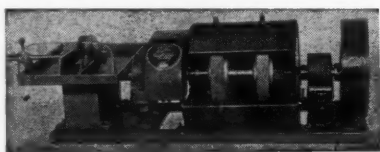
Complete (without motor)...\$135.00
1/3 h.p. motor..... 18.54
Crating charge 3.00
Shipping weight about 120 pounds.

This is perfect economy machine for sawing, grinding, sanding and polishing. Built for long trouble-free service.



E-12 — STAND MODEL

Same specifications as E-10, but with steel 34-inch high stand. Price complete with all accessories, stand and motor, ready to plug in \$179.00
Crating charge 5.00
Shipping weight about 220 pounds.



MODEL E-20

Designed for the lapidary artist who wants an economical, easy-to-operate unit — compact, quiet running and sturdy. Will give years of satisfactory service.

Complete with 6-in. Felker Diamond Saw, 1-in. 100-grit and 220-grit grinding wheels, sanding disc and leather-covered buff.

Complete (without motor)...\$85.00
1/3 h.p. motor..... 18.54
Crating charge 3.00
Shipping weight about 90 pounds.

All above prices are f.o.b. South Pasadena, California

Write for free literature
(And mention Desert Magazine)

**HIGHLAND PARK
LAPIDARY & SUPPLY CO.**

1009 Mission Street
South Pasadena, California

PY 1-2022

Amateur Gem Cutter

By LELANDE QUICK, Editor of The Lapidary Journal

We are happy to report the splendid success of the Midwinter Desert Rockhound Fair held at our Pueblo Art Gallery and printing plant on February 23 and 24. Everyone and everything smiled at us. Elsewhere in this issue the reader will find names and facts relative to the Shadow Mountain Gem & Mineral Society's Fair. We wish to report some of the human factors that do not get into news items.

First we wish to thank the friends who brought the beautiful cases of thousands of their wonderful gems and rocks; the people who did not think the trouble was too great or the invitation delayed. And we thank those who wrote nice letters of declination offering reasonable excuses for not coming.

For those who came the rewards were great. The desert climate was at its best; those who attended were high in their appreciation and the dealers reported without exception that the crowd was good to them. Fully a third of them stated it was the best show they have ever attended.

Our little show proved many things and here are a few of them. First of all we drew an accurate clocked attendance of 7017 people into an area 130 miles from Los Angeles that had almost no available sleeping accommodations of any kind. It was accomplished without television, radio, metropolitan newspaper publicity, "big names," private gem collections or any supposedly necessary hoopla. We merely asked the rockhounds to come through announcements in the *Desert Magazine* and the *Lapidary Journal*. Then our members got busy and worked on their own neighbors all through the Coachella Valley and extended personal invitations. We didn't spend a dime for decorations and we have no bills to pay now that it's over. The members worked so smoothly in taking care of our large attendance that no confusion existed at any time and our quarters were large enough so that at no time did we seem too crowded. There were no door prizes, no admissions, no raffles, no donations requested—and no ribbons.

Many people came to us during the show and said they were so glad there were no ribbons and then they cited instances of where ribbon awards had raised more fuss in their society than Korea has in world affairs. As one man said "when I went to my country school any girl who wore a hair ribbon invited a hair pulling contest and that's what happens in society shows." Another said "the best lapidary we ever had in our club was friends with everyone. Then he exhibited his material and when the judges rightly placed all the ribbons on his displays no one was his friend anymore. He couldn't stand it and he resigned when we needed his guidance, for he had taught many of us how to polish stones."

Of course people did come from all over the United States. "Uncle" Billy Pitts, the "Dean of the Lapidaries," came from Florida. Dr. Hudson (mentioned here last month) flew out from Dayton, Ohio. Two elderly ladies drove over from Santa Fe, New Mexico and bought all the doodads for a happy lapidary career. We doubt if more than five states were without visiting representatives because of the great number of winter tourists in the area.

The bragging rock table was a happy idea and enjoyed by many. Many unusual items were exhibited there. It is a good idea that other shows should adopt. Give the visitor from another society a chance to show your own members the rock he thinks is just about the best.

We now feel that we could, if we wished, promote this Midwinter Desert Rockhound Fair idea into the biggest annual affair of the rockhound fraternity — but we don't want to do it. We'd like to repeat the friendly fair every year but we don't particularly care if no more than 7000 come, as they did this year. We'd rather just show the neighbors the possibility for happiness in our hobby and do it all without politics or heartbreak. It could be too big to be nice.

The affair for our desert neighbors could not have been held without the unselfish cooperation of the leaders in the rock hobby in Southern California. We shall never forget a single one of them and we thank them for reciprocating their present favors for our past support.

Having a wide reputation for being a wag ourself we were particularly alert to the chuckle department of the hobby. There was the old gentleman who came into our office and picked up a rough Brazilian agate from one of our cabinets. The agate was polished on one side and he turned to his wife and said "Look Ma, how can they tell that this ugly old rock is so beautiful inside?" She replied, "Well Joe, you know how that's done. They do it with these here geeker counters."

Then there was the elderly lady who was looking at our "petrified potato," a rock we found many years ago in the Nipomo bean fields, and polished on one side. The polished side has a lot of white freckles in the agate and the lady wanted to know what they were. "They're vitamins," we said. Well what do you know! she replied. "Let me see 'em. I've taken a lot of them but I've never seen one." Completely awed we made no attempt to disturb her amazement. Let her argue with her doctor. And then there was the visitor who left a note on our desk asking us to drop him a line and let him know where he could obtain some garnets with the natural "faucets" showing. Of course so many visitors to our office display asked us how we get the patterns and designs in the rocks that we no longer chuckle over that. We just pretend we don't hear the question, for if we told them that the rocks come that way they wouldn't believe it anyway.

Our own collection has been greatly enhanced by generous donors who contributed many valuable specimens while they were here. We have a large and interesting permanent display here at all times and we urge the visitors coming through our area to stop and see it and rest a while.

Randall Henderson and myself thank all the folks who drove in to see the fair including both dealers and exhibitors. Many were amazed at what has been accomplished in the middle of the desert at this fountain head of information and publishing center for the rockhounds. And we feel certain that quite a few who came will come back and be living here with us when the next fair is held.

Gems and Minerals

FOUR-DAY CONVENTION PLANNED IN COLORADO

Rocky Mountain Federation of Mineral Societies will hold its ninth annual convention June 26 to 29 in Canon City, Colorado, the American Federation of Mineralogical Societies convening in conjunction. Main concern of delegates will be to determine instruments of incorporation of the federation.

For visitors' entertainment, conducted tours are planned through a local cement plant; to the Cripple Creek District and Molly Kathleen gold mine and to Wet Mountain Valley, cattle country of the Royal Gorge area. Each tour will be led by a lecture guide.

Other convention attractions are a chuck wagon buffalo barbecue, a program by Koshare Indian dancers and a banquet.

NEW CLUB OFFICERS ELECTED, INSTALLED

At an installation banquet in San Francisco, Robert White assumed presidency of the Northern California Mineral Society. Also taking office were Alden Clark, vice-president; Dave Friedman, treasurer, and Bertha Sanders, secretary. One of the new projects contemplated by the society this year is a series of mineralogy classes on crystallography and mineral analysis.

NEW EARTH SCIENCE CLUB ORGANIZED IN WICHITA

The third club of its kind in Kansas, the Wichita Gem and Mineral Society was organized early this year. At the first meeting, A. C. Carpenter gave a talk on "This Hobby of Geology." Election results named Stephen B. Lee, president; Brace A. Helfrich, vice-president; Mrs. Walter J. Broderick, secretary, and J. Walter Fisher, treasurer.

An illustrated story of the Mojave Desert entertained Pacific Mineral Society when Dr. P. A. Foster appeared as guest speaker. Colored slides pointed out outstanding geologic features, some of the rarer flowers and desert animals. A. R. Swaschka is new club president.

For their February "field trip," San Diego Lapidary Society traveled to Palm Desert, California, where they exhibited facet stones, rough facet material, polished cabochons, slabs, geodes and silver work at the First Annual Desert Mid-Winter Rockhound Fair sponsored by Shadow Mountain Gem and Mineral Society.

Two movies, one on Oregon and one on Arizona, were shown for Minnesota Mineral Club members by Hazen Perry. Speakers of the evening were Nathan Stuvetro, who told of his experiences hunting rocks in the West; Lawrence Jensen, who suggested how to figure pulley sizes to obtain correct speeds for saws and grind wheels, and Paul Sandell who discussed amber.

Newly-organized Columbia Basin Rockhounds Club had 112 members present at its third meeting in Vantage Ferry, Washington. The group plans numerous field trips along the Columbia River and in Ginkgo petrified forest.

DONA ANA COUNTY ROCKHOUNDS MAP YEAR

Sid Frank Sanders, re-elected president of Dona Ana County Rockhound Club, and his new board were installed at a banquet held in Las Cruces, New Mexico. Other new officers are: Shilo T. Smith, vice-president; Mrs. G. T. McQuillen, treasurer; Dorothy D. Smith, recording secretary; Mrs. A. G. Bardwell, corresponding secretary, and James T. Kilgore, historian. Plans for the year's activities were announced. Each meeting will center a different gem stone, and display cases will offer specimens as examples.

Emphasizing huge natural springs and their geological causes, R. H. Jordan of Colorado College delivered before the Colorado Springs Mineralogical Society an illustrated lecture on the geology of Florida. He showed specimens and maps.

Members of the Everett (Washington) Gem and Mineral Club searched their collection cases and attic boxes for fossils to display at the March meeting. Speakers for the evening program were Bill DeFeyer, Russ Haggard and Peter Krogh.

According to *Hollywood Sphere* of the Hollywood Lapidary Society, asbestos, because of its fibrous texture, was once thought to be fossilized flax.

ALTA INDUSTRIES
New Address:
Box 19, Laveen Stage, Phoenix, Arizona
New Location:
South 19th Ave., 1/4 Mile North of Base Line
LAPIDARY EQUIPMENT
Lapidary Equipment Manufacture & Design
16-18 inch Power Feed Slabbing Saw
Belt Sanders & Trim Saws
(Send Postal for free literature)

Covington DIAMOND BLADES

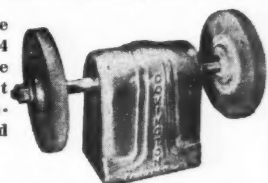
| | Heavy-Duty Super-Chgd. | Super- Charged | Standard Charged |
|-----|---------------------------|-------------------|---------------------|
| 6" | \$ 8.60 | \$ 7.60 | |
| 8" | 10.95 | 9.95 | |
| 10" | 14.50 | 13.35 | |
| 12" | 21.20 | 17.65 | |
| 14" | 27.95 | 24.45 | |
| 16" | 31.20 | 27.70 | |
| 18" | 62.50 | 41.25 | 34.40 |
| 20" | 74.25 | 49.50 | 37.95 |
| 24" | 88.80 | 62.60 | 48.95 |
| 30" | 142.50 | 119.75 | State |
| 36" | 215.30 | 179.10 | Arbor |

sales tax in California. Size

Allow for Postage and Insurance

Covington Ball Bearing Grinder

and shields are furnished in 4 sizes and price ranges to suit your requirements. Water and grit proof.



COVINGTON 8" TRIM SAW



and motor are compact and do not splash. Save blades and clothing with this saw.

BUILD YOUR OWN LAP

and SAVE with a COVINGTON 12" or 16" Lap Kit. We furnish everything you need. Send for free catalog.



COVINGTON Multi-Feature 16" Lap Unit Does everything for you.

COVINGTON 12" 14" or 16" Power Feed Diamond Saws

SAVE BLADES



Send for New Catalog, IT'S FREE

COVINGTON LAPIDARY SUPPLY
Redlands, California



**ALLEN
JUNIOR
GEM
CUTTER**

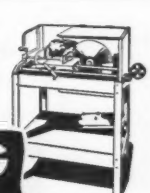
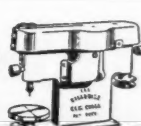
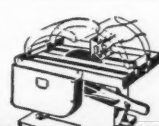
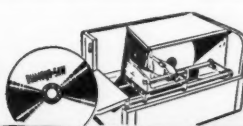
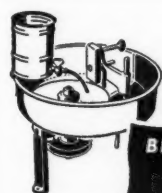
**A Complete Lapidary Shop
Only \$43.50**

- Ideal for apartment house dwellers.
- Polish rocks into beautiful gems.
- Anyone can learn.
- Instructions included.

Write for Catalog, 25c

**ALLEN LAPIDARY EQUIPMENT
COMPANY — Dept. D**

3632 W. Slauson Ave., Los Angeles 43, Cal.
Phone Axminister 2-6206



**BEFORE YOU BUY
SEND FOR OUR BIG FREE CATALOG**

The world-famous HILLQUIST LINE of lapidary equipment

LAPIDARY EQUIP. CO. 1545 W. 49 ST., SEATTLE 7, WASH.



GEMMART

ADVERTISING RATE
8c a Word . . . Minimum \$1.00

TEXAS CALCITE, that fluoresces a beautiful blue, also phosphoresces. Send \$1.00 for a large specimen post paid. B. & H. Gem Shop, 2005 N. Big Spring St., Midlands, Texas.

PEANUT PITCHSTONE (Alamasite)—Mexico's oddest semi-precious stone, for polishing or collecting, 3-lb. chunk \$5 postpaid. Or, Rockhound special, 1-lb. fragments \$1. Also Flor de Amapa (pink crystallized edidote) rare. Same prices. Alberto E. Maas, Alamos, Sonora, Mexico. Send checks only.

IMPORTANT NOTICE—1. Special—all for \$6.00: 1 Uralian Emerald cabochon, about 1 carat; 1 small genuine Siamese brilliant cut Zircon; 1 brilliant cut light to medium Amethyst; 1 ring blank India Bloodstone; 1 small rough piece Australian Opal and 1 colorful Mexico unpolished Agate slab. 2. Thousands of Uralian Emerald cabochons in light and medium color \$1.00 per carat; dark grade \$2.00 to \$3.00 per carat. 3. Genuine Burma carved Jade ovals for brooches or pendants. Light and medium green, approximately 1x1½", \$4.00 each. Minimum mail order \$5.00 plus postage. Satisfaction guaranteed or money promptly refunded. Southern Gem & Mineral Co., 2307 North Mesa (Highways 80 & 85), El Paso, Texas.

BEAUTIFUL PINK Taffy Rhodoclasite from Patagonia, 60c a sq. in. in slices or \$4.50 a lb. in chunks, including 20% excise tax. Please add California sales tax and postage. Eden Valley limbs 35c up. 20% excise tax extra, add California sales tax and postage. Eldon E. Soper, 433 So. Central, Glendale 4, California.

VARIEGATED AGATES mined at the Arizona Agate mines contain many beautiful colors and the world's most unusual blends. Come in Royal Flowers, Fern, Plume, Moss and many other designs. No orders please. Charles E. Hill, of the Arizona Agate Mines, Cave Creek, Arizona.

WRITE FOR DESCRIPTION—Rocks and Peridots. Box 101, Pima, Arizona.

IF YOU ARE A ROCKHOUND you need the Lapidary Journal. Tells how to cut and polish rocks, gives news of all mineral-gem groups. Tells how to make jewelry, carries ads of dealers in supplies, equipment, gems, minerals from all over the world. Well illustrated, beautifully printed. Subscription \$2.00 a year—back numbers 50c. Sample Copy 25c if you have never subscribed or been sampled. LELANDE QUICK, Editor, Palm Desert, California.

CABOCHONS: genuine imported Agates, Carnelians, Rose Quartz, Lapis Lazuli, Tiger Eye, etc., beautifully cut and polished. Oval stones in sizes from 10 mm. to 16 mm. 25c each. Minimum order \$1.00. Pacific Gem Cutters, 424 So. Broadway, Los Angeles, California.

FLUORESCENT MINERALS: Complete line of the fluorescent and rare minerals from the famous Franklin, N. J. mines. Complete line of Mineralights, \$12.50 up. Set of 10 fluorescent minerals, mounted in Styrofoam, labeled. Specify wave length, \$2.50. SPECIAL: 5 brilliant specimens of Willemite and Calcite (2x2) \$4.00. Fred W. Morris, 200 Red Maple Drive, Levittown, New York.

"DON'T MISS" Fine rough gems, Minerals, Silver and Lapidary supplies at Superior Gems & Minerals, 4665 Park Blvd. San Diego 16, California. (Sorry, no lists.)

RADIOACTIVE ORE COLLECTION: 6 wonderful different specimens in neat Redwood chest, \$2.00. Pretty Gold nugget, \$1.00, four nuggets, \$2.00, choice collection 12 nuggets, \$5.00. Uranium Prospectors, Box 604, Stockton, Calif.

TITANIA GEMS \$5.00 per carat for stones over 3 carats. Also mounted in 14K gold rings. All precious gems at lowest prices. Ace Lapidary Co., Box 67, Jamaica, New York.

FIFTY MINERAL SPECIMENS, ¾-in. or over, boxed, identified, described, mounted. Postpaid \$4.00. Old Prospector, Box 729 Lodi, California.

ATTENTION ROCK COLLECTORS. It will pay you to visit the Ken-Dor Rock Roost. We buy, sell, or exchange mineral specimens. Visitors are always welcome. Ken-Dor Rock Roost, 419 Sutter, Modesto, California.

FOR SALE: Beautiful purple Petrified Wood with Uranium, Pyrolusite, Manganite. Nice sample \$1.00. Postage. Maggie Baker, Wenden, Arizona.

BERYL CRYSTALS, Columbite, Tantalite, Purpurite, Andalusite Crystals, Rose Quartz, Hell's Canyon Agates. Mac-Mich Minerals Co., Custer, So. Dakota.

"TUNGSTEN PROSPECTORS" Fluorescent Collectors. Mineralights at Superior Gems & Minerals, 4665 Park Blvd., San Diego 16, Calif. Write for free literature.

ROCK COLLECTORS ATTENTION! Back in desert for winter—new rocks—new Trailer Rock Store, The Rockologist, Box 181, Cathedral City, California.

DESERT TEA: Picked fresh from the Mohave Desert natural tea gardens. Healthful, invigorating, \$1.00 per lb. postpaid. Desert Tea Co., 125 Erin Drive, Needles, California.

BEAUTIFUL THULITE SPECIMENS: Delicate pink, grey and green, cuts beautiful gems. Specimens in \$2.00, \$3.50 and \$5.00 sizes. Ask for list of many fine specimens and cutting materials, also fluorescent types. Jack The Rockhound, P. O. Box 86, Carbondale, Colo.

LARGE STOCK of rocks, relics, antiques, released for sale. 5 miles east of Banning, California on highway 99, Cabazon, California.

SELLING OUT—fine large rock and mineral collection. Located one mile from Jamestown, California, on Hwy 49 and 108 at the Wigwam. Forced to sell out as the highway left me. Twin Pines Trailer Court, Box 78, Jamestown, California.

FOR SALE: Lapidary equipment and rocks. Write G. C. Goodin, Box 363, Needles, Calif.

FLUORITE CRYSTAL ORE from an Old Mexico mine in clear or beautiful colors. Mine run rough in 4 inch pieces or larger. 5 lbs. \$1.50 or 10 lbs. \$2.50 plus postage. Also have Smoky Quartz and Calcite. Please remit by Post Office order. C. P. Hiebert, Box 814, Fort Stockton, Texas.

CLENOZOISITE, NEPHRITE JADE, Garnet, Nevada Black Diamond, Siliceous Sinter, Petrified Wood, Chalcedony nodule. All for \$1.00 Postpaid. Frey, Box 9350, Reno, Nevada.

20 ASSORTED COLORFUL 2x3 cabinet specimens. Good for a beginner or to add to your present collection. This beautiful selection only \$8.00 postpaid. L. M. Jones, Box 56, Bell Gardens, California.

HYALITE (Fluoresces green—short wave), Orpiment and Realgar, Rhodonite. All three from Nevada. Postpaid \$1.00. Frey, Box 9350, Reno, Nevada.

CYCADS (PARTIALLY AGATIZED) \$1.25 per slice, 5 sq. in. up, postpaid. Floyd L. Mangum, 780 W 4 N., Orem Utah.

FROM THE CAVES of New Mexico—Polished pieces of cave rock suitable for paper weights \$1.00 each. Cut and Polished book ends—\$4.00 up per pair. T. B. Perschbacher, 303 N. Mesa, Carlsbad, New Mexico. Dealer inquiries invited.

MINERAL SETS: 24 Colorful Minerals (identified) in 1x1 compartments, \$3.25 postpaid. PROSPECTOR'S SET — 50 minerals (identified) in 1x1 compartments in cloth reinforced, sturdy cartons, \$5.50 postpaid. Elliott Gem Shop, 235 East Seaside Blvd. Long Beach 2, California.

WE HAVE at all times a fine selection of cutting material and specimens. Specializing in Australian cutting fire opal. West Coast Mineral Co., 1400 Hacienda Blvd. (highway 39) La Habra Heights, California

SCOTT'S MINERAL MUSEUM closing out at sacrifice. Cut stones including 150 carat Kunzite—wonderful specimens at terrific bargains—about \$5000 worth of all kinds. Fluorescents already sold. Many cut sapphires. Will trade minerals for violins. Scott's Mineral Museum, Lake Drive, Encinitas, California. Route 2, Box 2400. Phone 8763.

STOP—LOOK—BUY—Specimens, slabs—rough, from A. L. Jarvis, Route 2, Box 125, Watsonville, California. On Salinas Highway State No. 1, 3 miles South of Watsonville.

Dan White, president of the Lapidary Association, showed colored slides of rock sections for members of Pasadena Lapidary Society.

Six years of activity were celebrated by Chicago Rocks and Mineral Society at a birthday meeting February 9. Guest speaker was Dr. George H. Otto, consulting geologist, who discussed "Where Florida Beaches Come From." Dr. Otto formerly was affiliated with the Illinois State Geological Survey, the United States Soil Conservation Program and did oceanographic research for the Navy during World War II.

Mrs. D. H. Clark of Orange Belt Mineral Society spoke on "Rainbow Iris Agate" at the second anniversary meeting of Twentynine Palms Gem and Mineral Society.

Forty or more minerals have been noted as petrifying agents and inclusions in fossil wood. Most common are various forms of silica. A. L. Inglesby of Fruita, Utah, discovered several specimens of silicified wood heavily permeated with yellow carnotite. Occurrences of this nature are considered rather rare.

Glendale Lapidary and Gem Society took time out from show planning to hear a program on the geology of Death Valley, California. Speaker, Professor Clemens of the University of Southern California geology department, traveled more than 10,000 miles last year surveying desert conditions for the U. S. Army. He illustrated his talk with slides. The society's show will be held May 17 and 18 in Glendale Civic Auditorium, Glendale, California.

New president of Sacramento Mineral Society is John Baierlein, who presided over the February meeting. Baierlein will be assisted through the club year by Raulin Silveira, recording secretary, and Henry Stidum, financial secretary.

Jack Reed will head the Yuma Gem and Mineral Society again this year. His new board includes Pauline Lohr, vice-president; Monica Baker, secretary-treasurer; Marion Koogler, parliamentarian, and Elmer Sipes, trek chairman. Vice-President Lohr will guide the Juniors.

Another good field trip map appeared in the February issue of *Delvings*, publication of Delvers Gem and Mineral Society, Downey, California. It directed Delvers to Last Chance Canyon, a well-known rockhound site which still yields petrified palm specimens, some agate and petrified wood.

MINERAL SPECIMENS and cutting material of all kinds. Gold and Silver jewelry made to order. Your stones or ours. 5 lbs. good cutting material \$4.00 or \$1.00 per lb. J. L. James, Battle Mountain, Nevada.

McSHAN'S GEM SHOP—open part time, or find us by directions on door. Cholla Cactus Wood a specialty, write for prices. 1 mile west on U. S. 66. Needles, California, Box 22.

DESERT GEM AND MINERAL SHOP: Set of 16¾ to 1" Specimens in box, \$1.00 and postage. Many larger specimens 25c up. Wombling Jade, olive green 75c per sq. in. Nodules from Oregon, New Mexico and California. Our shop is 2 miles West of Salome (where she danced) Arizona. L. C. Hockett, Box 276, Salome, Arizona.

WANTED: old mining and oil stock certificates. Books, letters, papers, pictures of the West and Southwest, Exploration, mining, surveying, etc. Will trade Franklin, N. J. fluorescent minerals, or pay cash. Send description and price. Fred W. Morris, 200 Red Maple Drive, Levittown, New York.

First Rockhound Fair Brings 7000 to Palm Desert Pueblo

Desert Magazine's Pueblo in Palm Desert, California, was a busy place February 23 and 24 when more than 7000 persons visited the First Annual Midwinter Desert Rockhound Fair.

George Merrill Roy, president of the Shadow Mountain Gem and Mineral Society, host to the fair; Don Butterworth, show chairman, and Leland Quick, exhibit chairman, agreed the show was successful beyond expectations.

Exhibits, open to all with no admission charge, were arranged throughout the *Desert Magazine* publishing plant. Mineral, gem and lapidary displays lined art gallery walls, the cases standing beneath canvases of leading painters of the desert scene. Dealers showed their wares and operated demonstration machinery in the mailing room and bindery; lapidary equipment was displayed in *Desert's* outdoor garages.

Los Angeles Lapidary Society was the largest single exhibitor, filling six cases with members' specimens. Contributors to its facet display were E. T. McLean, Harold Meachen, C. D. Maples, T. L. Daniel, A. B. Meiklejohn, Dr. F. W. Burcky and R. W. Mitchell. Jewelry by Alpha Evans, Charles Cook, Elsie McLean, Mrs. George McPheeters, Ted Schroeder, Walter Sommers and Thurston Ruddy was arranged in another case. Bert Monlux showed his cabochons.

Unusual art work produced by Los Angeles lapidary members included carved agate animals of Harry Ringwald; after dinner coffee spoons with agate handles, Charles E. Cook; silver salad set with cabochon insets, Alpha Evans; bookends, Lewis Humble; cameo shell, Clara Hueckell; and a silver filigree tree made by Willetta Gunderson, blossoming with faceted gems cut by her husband, Victor.

Walt Shirey displayed part of his collection of petrified wood from Western United States, and Leo D. Berner showed a number of his polished spheres in an individual display case.

Mrs. D. H. Clark of Orange Belt Society provided two interesting displays. On a large table in one corner of the gallery Mrs. Clark had arranged a dinner table offering "petrified food"—rock specimens which resembled various dishes. Her iris rainbow agate collection, on an adjoining table, was illumined from within a revolving frame which showed to best advantage the slabs mounted on it.

H. W. Proctor's fine display filled the exhibit case of Coachella Valley Mineral Society.

William and Florence Stephenson of the Hollywood Lapidary Society showed facets and polished slabs. Cabochons and polished slabs of Joseph H. Rogers and L. L. Bergen occupied two cases of Delvers Gem and Mineral Society, Downey, California. Jewelry, mineral specimens and cabochons formed the Banning Mineral Society exhibit.

Victor Valley Gem and Mineral Society, Victorville, was represented by the mineral collections of Helen Pratt and Gwen Holmes and the cabochon and jewelry work of Walt and Mary Pilkington. Jewelry, cabochons, facets and minerals shared the display space of San Diego Lapidary Society.

An unusual arrangement of limb casts was brought to the show by Mrs. A. E. Thiel of Montpelier, Idaho, who showed ceramic elves sawing logs from a woodpile of petrified branches. The giant smoky quartz crystal of Omar Kerschner, Indio,

caused much comment, as did Kerschner's thunderegg from the Hauser geode beds. The four cavities of this huge specimen contain seven different minerals.

For the Compton Gem and Mineral Club, Jim and Veryl Carnahan displayed minerals from their collection; John Orman, cabochons; Al Cook, Art Melonas and Bob Laurence, polished slabs; Mr. and Mrs. Wilson Christian, facets; Ida Coon, Dru Benefiel, Earl Williams, Arlo Lasley and Don McClain, jewelry; Henry Hart, copper minerals.

From the host society, Shadow Mountain exhibitors were: Leora Lizer, minerals; Al Gierok, cabochons; Alicia Lizer, chalcedony rose buttons; Mrs. Omar Kerschner, jewelry; Henry Dupske and Stone and Betty Wright, geodes. Susie Kieffer showed jewelry from her silver classes at Coachella Valley Union High School.

Leland Quick, editor of the *Lapidary Journal*, displayed his collection in the *Journal* offices. This room also provided a gallery for the paintings of Katherine F. Clarke of Pasadena, California. Mrs. Clarke used mineral crystals as themes for her oil compositions.

Many fine mineral specimens and demonstrations were offered by dealers. Outstanding was the fluorescent display of Ultra-Violet Products Company.

Special entertainment was provided Sunday by Mexican musicians and dancers from the Desert Cavalcade of Calexico, California. A non-professional group under the direction of Mrs. Ernest Chavez and Ma Keller, the entertainers sang and played Mexican songs.

A COLLECTION OF MINERALS

you will be proud to own. Price \$1.25 post paid anywhere in the U.S. 1—One Pyrite Crystal Group $\frac{3}{4}$ "x1" or larger. 2—One Martite Crystal Group $\frac{3}{4}$ "x1" or larger. 3—One Topaz. 4—One Limonite Pseudomorph Cube $\frac{3}{4}$ " to 1". 5—One Chalcedony (Botryoidal). 6—One Selenite Crystal.

W. T. ROGERS

1230 Parkway Ave.—Salt Lake City, Utah



Here Are The Gifts You've Been Looking For!

Petrified Wood, Moss Agate, Chrysocolla
Turquoise, Jade and Jasper Jewelry

HAND MADE IN STERLING SILVER

Bracelets, Rings, Necklaces, Earrings
and Brooches

SPECIALLY SELECTED STONES WITH
CHOICE COLORS AND PICTURES

Write for Folder With Prices

ELLIOTT'S GEM SHOP

235 East Seaside Blvd. LONG BEACH 2, CALIF.

Across from West End of Municipal
Auditorium Grounds

Hours 10 A. M. to 9 P. M. Daily Except Monday

Agate Jewelry Wholesale

Rings — Pendants — Tie Chains
Brooches — Ear Rings
Bracelets — Matched Sets
—Send stamp for price list No. 1—

Blank Mountings

Rings — Ear Wires — Tie Chains
Cuff Links — Neck Chains
Bezel — Cleveries — Shanks
Solder — Findings
—Send stamp for price list No. 2—

O. R. JUNKINS & SON

440 N.W. Beach St.
Newport, Oregon

NEW CATALOGS AVAILABLE

If you want Choice Cutting Material, Fine & Rare Materials, Geiger Counters, Mineralights, Books, Trim Saws, Fluorescents, Ores, Gems, Ring Mounts, or advice, write to . . .

MINERALS UNLIMITED

1724 University Ave., Berkeley 3, California

FOR SALE

18,000 ACRES MINERAL RIGHTS

In beautifully timbered area Taos Co., N. M. Many minerals known in region, including radio-active. Definitely priced to sell for health reasons.

CHAS. CALDWELL, BATTLE MTN., NEV.

"You'll love"

CONLEY MOUNTINGS

Beautiful, enduring, easy setting

Write for FREE catalog

WHOLESALE & RETAIL DISTRIBUTORS

SUPERIOR GEMS & MINERALS

4665 Park Blvd. San Diego 16, California

FAMOUS TEXAS PLUMES

Red Plume, Pom Pom and many other types of agate. Slabs on approval. Rough agate, 8 lb. mixture postpaid, \$5.00. Price list on request.

WOODWARD RANCH

17 miles So. on Hwy 118
Box 453, Alpine, Texas

Elected unanimously by El Paso Rock-hounds were A. L. Patterson, president; Edwin S. Masters, vice-president; Mrs. Kathleen Miller, secretary; Mrs. Mary Vogel, treasurer, and Mrs. Jane Cook, librarian.

Foregoing lapidary discussion for one meeting, the Los Angeles Lapidary Society explored a series of caves on a colored slide trip conducted by Hugh L. Mills and Kip Porter of Pasadena Grotto of the National Speleological Society. Among the slides were pictures of the aragonite crystals in Titus Canyon Cave, colorful Soldiers Cave in Sequoia Park and the Devil's Hole in Nevada.

Does Everything...

SAWS SANDS GRINDS POLISHES CUTS SPHERES FACETS LAPS



HILLQUIST Gemmaster

COMPARE!

*without motor.

Put the Hillquist Gemmaster beside any lapidary machine — cheaper, flimsy "gadgets" or units that sell at twice the price. Compare construction! Compare ease of operation! Compare how much you get for your money and you'll say, "I'll take the Gemmaster!"

Here is a worthy companion for our larger and more expensive Hillquist Compact Lapidary Unit. The smaller in size, the Hillquist Gemmaster has many of the same features. It's all-metal with spun aluminum tub. You get a rugged, double-action rock clamp, not a puny little pebble pincher. You get a full 3" babbitt sleeve bearing and ball thrust bearing. You get a big 7" Super Speed diamond saw and all the equipment you need to go right to work.

USES ALL ACCESSORIES

You can use all the regular Hillquist accessories with the Gemmaster: The Hillquist Facetor, Sphere Cutters, Laps, Drum and Disc Sanders, etc.

WRITE FOR FREE CATALOG

COMPLETE, READY TO USE! YOU GET ALL THIS:



BIG 7" Diamond Saw • 6" x 1" Grinding Wheel • 6" Felt Buff • 6" Backing Wheel • 6" Disc Sander • Double-action Rock Clamp • Oil Feed Cup • Water Feed Hose & Clamp • Dop Sticks & Dop Wax • Polish, Compound, Etc.

BUILT FOR LONG SERVICE!
No other low-cost lap unit gives you full 3" sleeve bearing, ball thrust bearing and pressure lubrication.

Lapidary EQUIPMENT CO. INC.

1545 WEST 49TH ST., SEATTLE 7, WASHINGTON

Installed as new officers of Fallon Rock and Gem Club were Oscar Engebretson, president; Mrs. Ruth Gilbert, vice-president; Mrs. Mabelle Robinson, secretary-treasurer, and Mrs. Eva Miller, historian. Harry Ringstrom is retiring president.

With shutters clicking left and right on field trips and at meetings, Compton Gem and Mineral Club should have dozens of entries in its current photo contest. Object of the competition is to assemble pictures for the historian's scrapbook. Prizes, to be awarded at the July meeting, will honor the best all-around picture, group picture, individual snapshot and color composition.

FIRE OPAL MEXICO

| | |
|------------------------------------|---------------|
| 10 Small Pieces Average 1/2" | \$1.00 |
| 5 Larger Pieces Average 3/4"—1" | 1.00 |
| 12 Nice Pieces Cherry & Honey Opal | 1.00 |
| 1 Small Vial Clear Fire Opal | 1.50 |
| 1 Large Vial Clear Fire Opal | 3.00 |
| | \$7.50 |

Entire Lot Postpaid for \$5.00

EXCHANGE: Agate or other cutting material, rough or polished, for good postage stamps.

Satisfaction Guaranteed

RALPH E. MUELLER & SON
1000 E. Camelback Road
Phoenix, Arizona

POCKET-SIZED MICROSCOPE



- MAGNIFICATION RANGE FROM 20X TO 60X
- Ideal for field work or shop use.
- Equipped with excellent wide field optics equivalent in quality to those provided in pedestal type microscopes.
- Has very high light efficiency and gives no chromatic aberration. Offers adjustable magnification for any power between 20X and 60X. All parts are made from brass or steel plated. Has dulite finish. Instrument comes complete with genuine grained cowhide leather case. An excellent value at this price—\$12.75 net.

CLARKSTAN

INDUSTRIAL DIV. D-9

11921 WEST PICO BOULEVARD
LOS ANGELES 64, CALIFORNIA

Members of East Bay Mineral Society were urged to bring questions to the February meeting in Oakland, California. A panel of experts was chosen to review questions and deliver answers. The month's field trip was to the old Tesla coal mining district where aragonite, petrified wood, manganese, bementite, rhodochrosite, coal, serpentine and silicon molding sand are to be found.

A priceless collection of carved jade and jade jewelry, most of it brought to this country for the San Francisco World's Fair, will be displayed at the 15th Annual Show of Southwest Mineralogists, April 26 and 27 at the South Ebell Club, 7101 South Menlo Avenue, Los Angeles.

Explaining the theory, adaptation and technique of the microscope, Dr. Ellis Roberts spoke on "Rock Thin Sections and the Polarizing Microscope" at a meeting of the San Diego Mineral and Gem Society. Since the cost of a polarizing microscope is prohibitively high, the speaker, professor of geology at San Diego State College, described how an ordinary one might be converted. According to Dr. Roberts it can be accomplished quite reasonably.

At a recent meeting of the Western Nebraska Mineral Society, members examined rock and mineral specimens under microscopes.

Election of officers was held early this year by the Fort Worth Mineral Club. Miss Millicent Renfro was chosen president. One of her first duties was to appoint committees for the 1952 Texas State Mineral Show to be held in Fort Worth May 2-4.

JASPER JUNCTION LAPIDARY

4909 1/2 Eagle Rock Blvd. — CL. 6-2021
Los Angeles 41, California

WORK SHOP

1112 Neola St. — CL. 6-7197
Los Angeles 41, California

WE SPECIALIZE IN CUTTING BOOKENDS
Custom sawing and polishing—24" saw
Slabs, bulk stone, Mineral Specimens
Polished Specimens & Cabochons
Machinery & Supplies

We rent polishing machinery by the hour

INSTRUCTION AT NO EXTRA COST

Call CL. 6-7197 for Appointment

Genuine Navajo Rugs

Ideal for Desert, Beach and Mountain Homes

Full Line of Lapidary
Equipment and Supplies

Catalogue 50c which will be credited on the first purchase amounting to \$5.00 or more.

Open House Tuesday Evening
Till 10:00 P.M.

COMPTON ROCK SHOP

1409 S. Long Beach Blvd.
Compton, Calif.

al Society
the Feb.
ornia. A
view ques
month's
al mining
ed wood
site, coal,
and are to

jade and
nt to this
orld's Fair,
ual Show
il 26 and
01 South
ation and
Ellis Rob
ns and the
ing of the
iety. Since
ope is pro
fessor of
ollege, de
might be
erts it can
/.

estern Ne-
examined
der micro-

early this
Club. Miss
ident. One
committees
al Show to

IDARY
CL. 6-2021

CL. 6-7197
a
BOOKENDS
-24" saw
cimens
hons

the hour
A COST
nent

Rugs

h and

ry
lies

credited
g to \$5.00

Evening

SHOP

Blvd.

GAZINE

Seattle Gem Collectors Club heard Adolph Kietz, retiring president, speak on processes of dyeing agate. He exhibited specimens he had dyed himself and several dyed in Germany. Following the evening program, elections were held. Mrs. Ralph U. Gustafson is new president; C. G. Nelson, vice-president; Mrs. R. H. Allen, secretary; Clarence L. Spear, treasurer, and Herman Witte, board member. Continuing board members are Mrs. W. L. Larson, Mrs. R. C. Goodman and R. H. Allen.

In its second edition, out in February, the Midwest Federation of Mineralogical Societies changed the name of its monthly publication to *Midwest News Bulletin*. Biggest news was announcement of the federation's 1952 convention and exhibition July 1-3 at Macalester College, St. Paul, Minnesota. The convention will be sponsored by the Minnesota Mineral Club and Minnesota Geological Society.

Al Parr will preside over 1952 meetings of Shasta Gem and Mineral Society of Redding, California. Other officers elected with President Parr are H. E. Bauer, vice-president; Mrs. Donald Carlson, secretary, and Mrs. Fred Saunders, treasurer.

"Crystals—the Flowers of the Mineral World" was the topic of Dr. Anthony R. Ronzio when he returned as guest speaker for Santa Fe Gem and Mineral Club. Dr. Ronzio discussed both natural and synthetic crystal forms.

With most probable destinations covered with snow, the field trip committee of Colorado Mineral Society is looking forward to summer excursions. To aid planning, questionnaires were sent to club members for preferences and suggestions.

State Mineral Society of Texas and the Fort Worth Mineral Club are cooperating on plans for the former group's annual meeting and mineral show May 2-4 at Pioneer Palace on grounds of the Fort Worth Municipal Auditorium.

Rainbow Rock, near Travertine Point, California, was the recent field trip destination of Coachella Valley Mineral Society. Members found good cutting material and numerous garden specimens.

Plans for an exhibition in April are being made by the Nebraska Mineral and Gem Club. Mrs. Harold Bergquist, chairman of a committee on initial arrangements, reported a gallery at Joslyn Memorial Hall is available for the show.

St. Louis Gem and Mineral Society celebrated its first anniversary with a 15-day gem and mineral exhibit at Webster Grove Public Library. Exhibits included mineral specimens, both rough and polished, finished cabochons, polished slabs and silver jewelry.

Tungsten-Mercury
Uranium



find

vital war metals!

with Ultra-Violet

MINERALIGHT

MINERALIGHT instantly identifies tungsten, mercury and many other valuable minerals now in great demand for re-armament. MINERALIGHT models for every requirement. Money-back guarantee. ACTUAL ATOMIC BLAST SAMPLE! Send 25c for new mineral specimen from first atomic blast at Alamogordo, New Mexico.

FREE!

Send for brochure DM
"Prospecting for
Scheelite (tungsten)
with Ultra-Violet."



ULTRA-VIOLET PRODUCTS, INC.

145 Pasadena Ave., South Pasadena, Calif.

Coast Gems and Minerals

SPECIALS

TITANIA (Rutile)—Top Quality
Guaranteed—per carat \$9.00

MEXICAN OPAL
1/4 lb. Honey & Cherry—No fire..... 1.00
1/4 lb. Honey & Cherry—with fire..... 4.00
1/4 lb. Opal in Matrix—with fire..... 1.00

PRECIOUS ROUGH FACETING MAT.
1/4 lb. Precious Topaz, mine run..... 1.25
1/4 lb. Amethyst (for cabs.), Mex..... 1.00
1/4 lb. Amethyst (for faceting), Mex..... 5.00
1/4 lb. Peridot, mine run (Ariz.)..... 3.00
1/4 lb. Kunzite, mine run (Pala, Cal.)..... 1.50

PRECIOUS CUT STONES (State Shape)
Genuine) Priced per carat
Tourmaline (Pala)—(State Colors).....\$5.00
Amethyst (Mex.)—very fine..... 1.50
Golden Topaz (Mex.)—very fine..... 4.00
Garnet Cabs.—Excellent Red Color..... 1.00
Synthetic) priced per carat
Alexandrite (Corun.) good color change 2.00
(Write for prices of other stones)

10 DIFF. MINERAL SPECIMENS.....\$4.50
Carefully selected. Is a valuable aid in helping identify and classify your findings or makes a wonderful gift. Boxed and labeled. 70 different..... 3.00
35 different..... 1.50

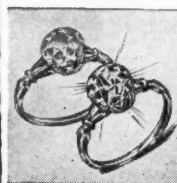
81 ABS—5c per square inch.
Consists of a mixed lot of 10 or more different types, a few of which are Jade, Tiger's Eye, Lapis, Palm, Sagenite, Wood, Agate, Jasper and others. Minimum order—40 sq. inches..... 2.00

MIXED CUTTING MATERIAL, per lb......25

SEND FOR OUR CIRCULAR TODAY

Please add postage to all orders. If not a dealer, add 20% Fed. Tax to slabs, cut stones, and precious rough. California Sales Tax.

11669 Ferris Road, El Monte, California
FO-rest 8-7551



*More Brilliant.
More Fire..
than the Diamond!*

FACETED ROUND GEMS OF SYNTHETIC TITANIA

have five times more ability than the Diamond to break light into its component colors producing a magnificent rainbow effect.

SEND FOR A FREE PRICE LIST describing

Titania Rainbow Jewelry

OTHER SERVICES OFFERED

JEWELRY REPAIR SERVICE
GEM STONE CUTTING
GEM CUTTING EQUIPMENT, MATERIALS
AND SUPPLIES
JEWELRY MAKING TOOLS AND MATERIALS
MINERAL SPECIMENS
FLUORESCENT LAMPS, GEIGER COUNTERS
URANIUM SAMPLES, FLUORESCENT MINERALS
FIELD TRIP GUIDE BOOKS
ROUGH AUSTRALIAN OPALS

GRIEGER'S

1633 EAST WALNUT STREET
PASADENA 4, CALIFORNIA
PHONE SYCAMORE 6-6423

NEW—Sensational! GEIGER COUNTER



"The SNOOPER"
LOW PRICE
ONLY **\$24.95**
COMPLETE

Find a fortune in uranium with this new, super-sensitive Geiger Counter. Get one for atom bomb defense. So small it fits in the palm of the hand or in the hip pocket, and yet more sensitive than many large, expensive instruments. Weighs only 1 1/4 lbs. Uses flashlight battery. Low price includes earphone, radio active sample, instructions. Sold with ironclad moneyback guarantee. **ORDER YOURS TODAY**—Send \$5.00 with order or payment in full to save C.O.D. Write for free catalog on treasure finders for gold, silver, etc. and larger, more elaborate Geiger Counters.

DEALER INQUIRIES PRECISION RADIATION INSTRUMENTS
INVITED 4113 D, W. JEFFERSON, L. A. 16, CALIF.

BLACK LIGHT KITS

110 VOLT LONG WAVE
FOR ULTRA - VIOLET FLUORESCENCE

NOW . . . you can build your own black light equipment at a new low cost with these easy-to-assemble components. Geologists, mineral prospectors and hobbyists can easily make laboratory black lights for mineral identification. Signs, posters, pictures, fabrics, house numbers . . . anything painted with fluorescent paint glows with eye-appealing fluorescence under black light. Kit contains: Ultra-Violet tube, brackets, ballast, starter, wire, plug and wiring diagram.

Special! 4 Watt Kit—(5 1/4" tube).....\$3.00
8 Watt Kit—(12" tube).....\$4.00

Enclose full amount with order • Equipment shipped postpaid

C & H SALES COMPANY

2176 EAST COLORADO STREET

PASADENA, CALIFORNIA



By RANDALL HENDERSON

AS THIS is written early in March, the dunes on the Southern California desert are covered with the green sprouts of verbena and evening primrose. Normally they would have been in full bloom by this time. But desert weather has been erratic this season and this has made precise forecast as to the date of the wildflower display almost impossible.

Next Sunday, Cyria and I will be going down near the shore of Salton Sea to look for desert lilies. These exquisite flowers seem to do best in the badland areas—as if to compensate with their beauty for the aridity of their environment.

Their bulbs remain deep in the sand, generally from eight to twelve inches, and it is only when heavy rains come that the moisture seeps down and starts that miraculous process of germination. One cannot live close to the desert without acquiring a deep reverence for the works of the Creator—and desert lily is one of the rarest of God's creations.

* * *

One of the letters which came to my desk during the past week is from a law student in Los Angeles who takes issue with views which I expressed last month on the subject of hunting. It is a reasonable letter, and I want to quote from it. He wrote:

"In the March issue of *Desert* under 'Just Between You and Me,' you made certain comments regarding hunting and hunters to which I feel I must take exception.

"I believe the wild sheep in California should be protected, yes, but too many areas where the hunting for deer would be good, are closed due to the complaints of persons whom I have heard many hunters call the 'Bambi' school of outdoorsmen.

"What these people fail to understand is that in our present social order, where it no longer is necessary to kill in order to live—except each other—wildlife is a crop to be harvested just like any other crop.

"Each sportsman in California pays an average of \$10.00 a year to maintain and support wildlife in California, while the people who seek to do away with the sport of hunting spend nothing for the preservation of the wildlife.

"My second argument is directed at those of the 'Bambi' school who are not vegetarians. Let me suggest that the living counter-part of the T-bone steaks which these people enjoy had a much less sporting chance of remaining alive than do the deer sought by the hunter.

"One does not have to go into the woods on the opening day of the hunting season to discover the killer instinct in one's fellow man. The term 'killer instinct,' by common usage has acquired an implication of recrimination which I do not feel should be associated with the grand sport of hunting.

"Let me say that I still enjoy your magazine, and have time to admire the wonders of Nature on my trips into the woods and deserts. If you have never had the thrill of hunting you have missed something!

"I have five acres in Morongo Valley and wouldn't trade them for this entire city."

* * *

That is a fair presentation in behalf of the sportsmen who like to hunt.

I should make clear that I am not crusading against hunters or hunting. My ancestors, a few hundred years ago, would not have survived had it not been for the game they killed. For them it was a necessary pursuit. Today it is optional—but the primitive instinct is still strong, and I am not condemning it.

However, this is a changing world, and the evolution in my own thinking is made clear in the letter I wrote the young student, as follows:

"The difference between your attitude and mine is merely the result of a transformation which time and environment have brought to me. At your age, just out of school, my home was in the Palo Verde valley where I could go out, and within the Blythe townsite limits, shoot enough quail for a meal. And I did that many times. I was an avid hunter—quail, ducks, geese and doves.

"Forty years on the desert in close association with its wildlife have brought a gradual change in my feeling toward the birds and animals with which I have been in contact—just as it will in yours, I am sure, if some day you move out to that jackrabbit homestead in the Morongo and learn to know and respect the quail which will come to your doorstep, if you give them a little encouragement. After while you will resent anyone wanting to shoot those quail, just as you would resent anyone killing your pet dog. You will learn that wildlife on the desert has a terrific and continuous struggle for survival—and the friendship of those hardy little pioneers of the bird and animal world will mean more to you than wild meat on your table.

"I am not trying to change your views, or condemn you for being a hunter. I merely am telling you what time and the desert have done to me so you will understand why I am always on the side of those who would protect and conserve the wildlife. The same thing could happen to you.

"If I were a rancher in the Imperial Valley and great flocks of ducks were coming in—as they sometimes do—and devouring the young grain in my field, I would do as you would do—I would make war on the ducks. But as long as they do not interfere with my way of living, I will not interfere with theirs. To me that is a practical application of that good old rule—live and let live."

Books of the Southwest

NEW COLOR HANDBOOK FOR WILDLIFE STUDENTS

Illustrated with 450 full color plates, *Wildlife in Color*, by Roger Tory Peterson, is a picture book for anyone who loves the outdoors.

The paintings, by 18 of America's leading wildlife artists, first appeared as a series of poster stamps. Here in book form for the first time and accompanied by Peterson's expert commentary, they offer the nature student an excellent field handbook.

Unlike most books of its kind, *Wildlife in Color* is arranged by wildlife communities, not by family relationships. Thus, animals, flowers, reptiles and birds of the desert region are grouped in one section. The varied habitats of North America are described in terms of the trees and flowers that grow there; the mammals, birds, butterflies, fish and other wildlife that live there.

Author Peterson, an all-round naturalist, is best known for his bird studies. His *Field Guide to the Birds* is used by almost all bird watchers, beginners and experts alike. The Peterson system of field identification, revolutionary when it first appeared in 1934, is now accepted as standard and has made quick, accurate identification possible.

Wildlife in Color presents a vivid and informative cross section of outdoor America.

Sponsored by the National Wildlife Federation. Published by Houghton Mifflin Company. 450 color illustrations, 191 pages. \$3.00.

PHOTOGRAPHIC ESSAY DESCRIBES WAY OF LIFE

In 1868 there were 15,000 Navajos. Today these Indians number at least 68,000 — America's largest Indian tribe, and major Indian problem.

How shall this small nonliterate society be brought into satisfactory adjustment with Western industrialized civilization? Can any ethnological harmony be accomplished without utterly destroying the human values held by the minority group? If a solution is attempted will the individuals involved emerge in a state of personal disorganization?

To understand the "Navajo problem" and to realize the possibilities and limitations involved in attempting to solve it, one must understand the Navajo culture—the ways of life which

these people have developed over centuries of experience in their natural and human environment in the American Southwest. Perhaps the most graphic description ever presented of an American Indian people is *Navaho Means People*, a photographic case history published in November by the Harvard University Press.

Leonard McCombe, *Life* photographer-journalist, took the photographs while living on the New Mexico-Arizona reservation. He has captured, with startling reality, The People (as the Navajo call themselves) at work, at play, participating in their secret ceremonials of burial, puberty and healing—the Navajo living the life they understand.

Evon Vogt and Clyde Kluckhohn, Harvard University anthropologists who have had years of research experience with the Indian people, supplied the commentary. The collaboration has produced more than 180 superb photographs with excellent expository captions and a final analysis of the culture and its dramatic conflict with the white man's ways.

The pictorial essay produced by experts McCombe, Vogt and Kluckhohn is at once an important document and a fascinating picture of a people and a way of life.

Published by Harvard University Press, 1951, 159 pp. 181 halftone illustrations. \$5.00.

UTAH HISTORICAL SOCIETY RETURNS TO QUARTERLIES

After many years of publishing book-length monographs, the Utah State Historical Society has returned to its original quarterly schedule. The change will permit publication of more varied topics bringing to the reader a balance between source documents and interpretive articles by present-day writers. The four issues will be published in January, April, July and October.

Volume 20, Number 1, the first issue to appear under this program, was released January 1. It contains several articles of value to the history of Utah and the Intermountain West, among them "Coin and Currency in Early Utah," by Leonard J. Arrington, assistant professor of economics at the Utah State Agricultural College, and "A Pioneer Paper Mirrors the Breakup of

Isolation in the Great Basin," by Dr. A. R. Mortensen, executive secretary-editor of the Utah State Historical Society.

Of especial interest is the journal of Robert Chalmers, edited by Charles Kelly, and a companion article by Mr. Kelly which actually serves as an introduction to the Chalmers journal. Entitled "Gold Seekers on the Hastings Cutoff," these two articles serve to complete the picture of travel over the Hastings Cutoff to the end of 1850 as told in Volume 19, *West From Fort Bridger*.

Together with these full-length articles, and in keeping with the society's new policy, appear several book reviews, a list of publications dealing with the history of the West and a section devoted to historical notes.

• • •

Rockhunters, geologists, historians and archeologists will find interesting reading in Bulletin 154 of the California Division of Mines. *Geologic Guidebook of the San Francisco Counties* is a collection of essays by various authors who describe the history, geology, minerals, fossils, landscape, industry and travel routes of the region. Numerous illustrations are included, drawings and photographs of California Indian artifacts being particularly interesting. Bulletin 154 may be purchased from the Division of Mines, Ferry Building, San Francisco, California.

If You Like the Desert You Will Like
LOAFING ALONG DEATH VALLEY TRAILS
By William Caruthers
"Holds the interest from cover to cover, without one dull moment."
At Better Book Stores Everywhere

Keep Your Back Copies of Desert for Quick Reference

Attractive loose-leaf binders in Spanish grain leather, gold-embossed, are available for those Desert readers who want to keep their back copies for the maps and travel information they contain. Each binder holds 12 issues. Easy to insert, and they open flat.

Mailed postpaid for
\$2.00

THE *Desert* MAGAZINE
PALM DESERT, CALIFORNIA



WHERE TO STAY ... and Relax in Coachella-the Valley of the Palms



Motorists who plan to come to the desert for the wildflower season in March and April are urged to write or phone for reservations

PALM SPRINGS

HORACE HEIDT'S *Lone Palm Hotel*

ROOMS • SUITES • COTTAGES

Units are spacious, comfortable, and attractive and air cooled. Dining room and cocktail lounge. Large heated swimming pool.

For reservations see local travel agent or write or phone Si Slocum, manager, 1276 North Indian Avenue, PALM SPRINGS, CALIFORNIA. Phone Palm Springs 2241.

SUNNY SANDS APARTMENT HOTEL

Complimentary Continental Breakfast
Paddock Swimming Pool

Phone 9023

1565 No. Palm Canyon Drive Palm Springs, California

PALM DESERT

NOW OPEN!

LARREA LODGE

Palm Desert's newest apartment hotel. Air conditioned throughout, beautifully furnished. Fully equipped kitchenettes. Heated swimming pool. Just 3 blocks from Shadow Mountain Club.

OPEN YEAR 'ROUND

P. O. Box 413 PALM DESERT, CALIF.

PHONE 76-3801

Erick Bergquist — Paul Watson, Co-owners

PALM DESERT BILTMORE

12 Miles Southeast of Palm Springs
PALM DESERT, CALIFORNIA

P. O. Box 32

ADELL LINGO, Owner

PHONE 76-2371

INDIO

DR. HAYES DESERT PALMS GUEST RANCH AND DATE SHOP

Desert Palms Ranch has an atmosphere of friendly hospitality, beautiful grounds, heated swimming pool, breakfast rides, and excellent guest accommodations. Approved by the Auto Club of Southern California and the AAA.

Box 282 • Phone 7-3387 • INDIO, CALIFORNIA

BUENA VISTA COURT

Finest and Most Complete Accommodations

RATES FROM \$6.00 PER DAY

Fully Equipped Apartments

84-423 Miles Ave

INDIO, CALIFORNIA

VAR-LIN MOTEL & TRAILER PARK

New, modern, aircooled units with panel ray heating, with or without kitchens. Spacious patio and parkway.

Children's playground

Phone 7-3708

On Highway U.S. 60-70-99

INDIO, CALIFORNIA

RICK'S MOTEL AND DATE SHOP

NEW—MODERN—AAA APPROVED

Adobe Units on Highway 60-70-99

in the Heart of Coachella Valley

Phone 7-2908

INDIO, CALIFORNIA

RANCHO MIRAGE

YOU'LL ENJOY RANCHO MIRAGE HOTEL APARTMENTS

(1/2 mile east of Thunderbird Golf Course on Highway 111)

Quiet Charm—Games—Private Lawn—Swimming Pool

Phone ANgelus 7287, Los Angeles, or Palm Springs 8-4415

P. O. BOX 30, RANCHO MIRAGE, CALIFORNIA

1000 PALMS

HIDDEN SPRINGS RANCH CLUB — POOL — COTTAGES — SNACK BAR \$10.00 per day (2) European Plan

Simplicity — Good Food — Congenial Company

Located on east Ramon Road 11 1/2 miles from Palm Springs
2 1/2 miles east of Thousand Palms

PHONE 345 • BOX 7 • THOUSAND PALMS, CALIFORNIA